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ABSTRACT

Five hundred eighty-nine teachers and twenty joint staff members for agribusiness and natural resources education in Florida were surveyed to determine and compare their perceptions of the professional education competencies needed by teachers of agribusiness and natural resources education. The findings, based on 370 responses, were as follows: (1) of 179 competencies, the teachers recognized fourteen as low to moderate in importance, 119 as moderate to high in importance, and forty-six as high to very high in importance; (2) the joint staff members rated two of the competencies as low to moderate in importance, fifty as moderate to high in importance, and 127 as high to very high in importance; (3) based on the combined input of teachers and joint staff members, the most important to the least important competency categories were instructional planning; instructional management; instructional evaluation; Future Farmers of America (FFA); guidance; professional role and development; coordination and supervised occupational experience program; program planning, development, and evaluation; instructional execution; school-community relations; and adult education; (4) joint staff members rated all competency categories higher than did teachers; and (5) some differences in the perceptions of teachers were related to school type, numbers of students, teachers' ages, teaching experience, and teachers' enrollment in agribusiness and natural resources education. (This report includes twenty-nine tables. The survey form and letters are appended.) (EM)

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ED155302

Final Report

Project No. VTAD-5 C7-004

From 7/1/76 to 9/30/77

# Development and Verification of Professional Education Competencies Required by Agribusiness and Natural Resources Education Teachers in Florida

Department of Agricultural and Extension Education
Institute of Food and Agricultural Sciences
University of Florida
Gainesville, Florida 32611

Jimmy G. Cheek
Carl E. Beeman
Samuel L. Adams

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Florida Department of Education
Division of Vocational Education
Tallahassee, Florida 32304

ABSTRACT

Purpose

The central purpose of this study was to identify and verify the professional education competencies needed by teachers of agribusiness and natural resources education in Florida. In order to achieve this purpose the following specific objectives were developed as guidelines for conducting this study:

1. Identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by incumbent teachers of agribusiness and natural resources education in Florida.

2. Identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by the state staff, teacher educators, and county supervisors (joint staff) for agribusiness and natural resources education in Florida.

3. Determine the professional education competencies needed by teachers of agribusiness and natural resources education based on the combined input of incumbent teachers and the joint staff for agribusiness and natural resources education in Florida.

4. Compare the perceptions of incumbent teachers and the joint staff for agribusiness and natural resources education in Florida regarding the competencies needed by teachers of agribusiness and natural resources education in Florida.

5. Compare the perceptions of incumbent teachers, according to selected demographic characteristics, regarding professional education competencies needed by agribusiness and natural resources education teachers in Florida.

Research Procedure

The population for this study consisted of incumbent teachers, state staff members for agricultural education, teacher educators in agricultural education, and county supervisors of agricultural education in Florida. In order to obtain the requisite information, closed form opinionnaires were developed, field tested, and refined. Three hundred seventy completed opinionnaires were received representing 60 percent of the total instruments mailed. Responses from 22 joint staff members (92 percent) and 348 teachers (59 percent) were received.

To analyze data pertaining to objectives one and two, means were determined for teachers and for joint staff members. Data pertaining to objective three were analyzed using descriptive statistics; however, in this case, the mean for each item for teachers was added to the mean

for each item for the joint staff. The sum was then divided by two to produce the combined means. The t-test was used to analyze data pertaining to objective four and analysis of variance was used to analyze data pertaining to objective five. Both used the .05 level of significance as the critical standard.

## Major Findings

1. Of the 179 competencies studied, incumbent teachers recognized 14 (8 percent) of the competencies as low to moderate in importance, 119 (66 percent) of the competencies as moderate to high in importance, and 46 (26 percent) of the competencies as high to very high in importance.

2. Joint staff members rated two (1 percent) of the competencies as low to moderate in importance, 50 (28 percent) of the competencies as moderate to high in importance, and 127 (71 percent) of the competencies as high to very high in importance.

3. The means that resulted from the combined input of both incumbent teachers and the joint staff yielded the following results: six (3 percent) of the competencies were considered low to moderate in importance; 75 (42 percent) of the competencies were considered moderate to high in importance; and 98 (55 percent) of the competencies were considered high to very high in importance.

4. Based on the combined input of teachers and joint staff members, the most important to the least important competency categories were as follows: instructional planning; instructional management; instructional evaluation; FFA; guidance; professional role and development; coordination and supervised occupational experience program; program planning, development, and evaluation; instructional execution; school-community relations; and adult education.

5. Joint staff members rated all competency categories higher than did teachers and significant differences existed at the .05 level relative to six of the 11 competency categories between teachers and joint staff members.

6. Significant differences at the .05 level existed regarding: four competency categories as perceived by teachers employed in varying school types; three competency categories as perceived by teachers with varying numbers of students per day; nine competency categories as perceived by teachers with varying ages; one competency category as perceived by teachers with differing educational levels; two competency categories as perceived by teachers with varying numbers of teachers employed in the department; five competency categories as perceived by teachers with varying years of agricultural teaching experience;

and five competency categories for teachers who had enrolled in agribusiness and natural resources education compared with teachers who had not been enrolled.

ACKNOWLEDGEMENT

The writers wish to express gratitude to the agribusiness and natural resources education teachers, state administrative staff in agricultural education, teacher educators in agricultural education, and county supervisors in agricultural education throughout the state of Florida who participated in this study. Without their assistance in completing and returning the opinionnaires, this study would not have been possible. Consequently, the practical implications concerning the professional competencies needed by agricultural teachers in Florida arising from this study could not have been identified.

Thanks also goes to those who were involved in field testing the instrument. The assistance of several faculty members at University of Florida in planning this study and evaluating the instrument is also gratefully acknowledged. Appreciation is also extended to Dr. R. C. Littell, Associate Professor of Statistics for his assistance related to statistical analysis of the data.

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# CHAPTER I

## INTRODUCTION

Competency-based teacher education is a development receiving considerable attention from professional educators in the United States. Florida is currently involved in a major effort to implement competency-based vocational education (Harrington, Johnson, Fagan, Freedman, and Reichman, 1976). While several research studies have focused on the professional competencies required by vocational teachers in general (Erpelding, 1972; Cotrell, Bennett, Cameron, Chase, Molnar, and Wilson, 1971) and some studies have sought to determine the professional competencies required by vocational agriculture teachers within specific states (Matteson, Bjoraker, and Jensen, 1974; Garner, 1974; Moore and Bender, 1975; Herring, 1976), no studies have been conducted regarding the professional competencies needed by teachers of agribusiness and natural resources education in Florida. Because of the uniqueness of the agribusiness and natural resources education program in Florida and the lack of data that can logically be generalized to Florida, it was important that research of this nature be conducted.

Vocational education in agriculture in the United States has many commonalities; while at the same time, possesses uniquenesses among regions of the country and among states within regions. Programatically, the agribusiness and natural resources education program in the public schools of Florida is divided into four major areas: pre-vocational programs at the middle school level, secondary programs, post-secondary programs, and adult programs. Florida is one of the few states that have pre-vocational education programs in agriculture. Furthermore, each of the program areas possess some uniquenesses when compared to other states in structure, curriculum content, and facilities, to mention only a few. Also, the wide array of courses and programs offered is another factor which prohibits generalizing competencies identified in other studies to Florida.

While most states are experiencing shortages of agribusiness and natural resources education teachers, the shortage in Florida is acute. This is due to the rapid expansion of the program and the failure to increase the supply of fully certified teachers. To meet the demand for teachers, persons with technical agricultural degrees and other backgrounds have been employed with only temporary certification. The diversity of these teachers who hold temporary certification is another uniqueness.

Considerable work has been directed toward development of professional competencies to be included in the agricultural education curriculum; however, no formal research has been conducted. Obviously, an endeavor of this magnitude and significance demands a strong research base. This study provided that base and focused on the professional educational competencies needed by teachers of agribusiness and natural resources education in Florida

## Purpose and Objectives

The central purpose of this study was to identify and verify the professional education competencies needed by teachers of agribusiness and natural resources education in Florida. In order to achieve this purpose the following specific objectives were developed as guidelines for conducting this study:

1. Identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by incumbent teachers of agribusiness and natural resources education in Florida.

2. Identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by the state staff, teacher educators, and county supervisors (joint staff) for agribusiness and natural resources education in Florida.

3. Determine the professional education competencies needed by teachers of agribusiness and natural resources education based on the combined input of incumbent teachers and the joint staff for agribusiness and natural resources education in Florida.

4. Compare the perceptions of incumbent teachers and the joint staff for agribusiness and natural resources education in Florida regarding the competencies needed by teachers of agribusiness and natural resources education in Florida.

5. Compare the perceptions of incumbent teachers, according to selected demographic characteristics, regarding professional education competencies needed by agribusiness and natural resources education teachers in Florida.

## Need For The Study

The need for this study was based on the large number of agribusiness and natural resources education teaching positions in Florida, the anticipated future demand for well trained teachers in this field, the tenuity of research regarding the professional competencies needed by teachers of agribusiness and natural resources education in the nation, and the absence of research regarding the professional competencies needed by agribusiness and natural resources education teachers in Florida. Furthermore, it was predicated upon the necessity to identify and verify those competencies needed by agribusiness and natural resources teachers in Florida so that existing educational programs could be modified and improved, thus producing teachers with the most critical professional education competencies.

## Definition of Terms

For the purpose of this study, the following terms were defined:

Agribusiness and natural resources education teachers are those persons employed to teach agribusiness and natural resources education at the pre-vocational, secondary, post-secondary, and adult education levels. Teachers, vocational agriculture teachers, and teachers of agriculture are used as synonyms in this report.

Competent is the state of having the essential knowledge, skills, or attitudes to be legitimately qualified or capable of performing professional competencies.

County supervisors of agriculture are those persons employed by local county school districts to supervise and administer the agribusiness and natural resources programs of a county. In this report, they are also referred to as county supervisors.

In-service education refers to organized learning experiences provided through workshops or graduate studies for persons employed or planning to become employed as teachers of agribusiness and natural resources education.

Joint state and county staff is used in this report to refer to county supervisors of agriculture, teacher educators, and state staff members as a combined group. The words joint staff are also used to denote the joint state and county staffs.

Pre-service education involves those organized learning experiences for prospective instructors which prepares them for future employment as teachers of agribusiness and natural resources education.

Professional education competency is a knowledge, skill, or attitude a teacher must possess to adequately execute his job as a teacher, exclusive of technical competencies. Examples would include planning daily lessons and preparing budgets and reports. The words professional competency and competency are used as synonyms in this report.

Tasks are those components which are performed in the execution of a given competency.

State staff members are those persons employed by the Department of Education to supervise, administer, and provide consultative services to the state wide agribusiness and natural resources education program in Florida. This includes the program director, program consultant, and the five regional consultants.

Teacher educators are those persons employed as university faculty members to provide pre-service and in-service education for prospective

and incumbent teachers of agribusiness and natural resources education in the area of professional education related to agricultural education.

## CHAPTER II

## REVIEW OF LITERATURE

The movement toward competency-based teacher education is a development receiving considerable attention from professional educators in the United States. Florida is currently involved in a major effort, lead by the Department of Education and selected teacher education departments, to implement competency-based education. In order to make this transition smoothly, effectively, and to make certain the appropriate competencies are included in the curriculum, it was determined that a research study dealing with professional competencies needed by agribusiness and natural resources education teachers was necessary. This project was designed to identify and verify those competencies and provide the basis upon which a competency-based teacher education program in agricultural education could be developed for Florida.

Beamer (1956) attempted to reconstruct the professional coursework in the vocational agriculture teacher education curriculum at the University of Tennessee by gathering data on the importance of certain abilities to teaching vocational agriculture. Beamer's study involved school principals and teachers of vocational agriculture, with some data collected from supervisors, teacher educators, and student teachers. As a result of the study, Beamer developed a curriculum for the University of Tennessee that emphasized abilities that the respondents deemed to be of great importance for a teacher of vocational agriculture.

McGhee (1967) identified the professional and technical needs of teachers of vocational agriculture as they related to a complete program of vocational agriculture in West Virginia. This study included teachers of vocational agriculture, the state staff in teacher education and supervision, and principals in schools having vocational agriculture departments. The findings of the study identified professional and technical needs of vocational agriculture teachers which in turn provided a basis for developing both pre-service and in-service educational programs in both the professional and technical areas for teachers of vocational agriculture in West Virginia.

In another study (Courtney, 1967), an instrument was developed for establishing a core of professional knowledge and abilities required in training programs for vocational teachers in the five traditional areas of vocational education. The instrument was derived from an analysis of vocational course offerings in several teacher education institutions. The study identified 200 competencies that were deemed necessary for all vocational teachers to possess.

A second study by Courtney and Halfin (1969) sought to determine the common training requirements of secondary-level vocational teachers. In that study, 40 vocational teachers were randomly selected representing four states: Pennsylvania, Iowa, North Carolina, and New Jersey.

Ten teachers were selected from each of the four states with two teachers representing five vocational disciplines; vocational agriculture, home economics, trades and industrial education, distributive education, and business education. The respondents assigned ratings to the items using a Likert type scale. The verimax rotation method of factor analysis extracted a total of 14 vectors in which one or more of the 40 variables showed a factor loading of 50 or greater. One implication derived from this study was that a possibility exists for a common core of professional training experience within a broadly-based, vocational teacher education curriculum

Calvin Cotrell, working with several other researchers, conducted one of the most noted series of studies on the development, demonstration, and testing of curricula for the preparation and in-service education of vocational and technical education teachers. The study was divided into five reports devoted to determining the performance requirements of teachers.

The primary objective of the first report was to determine the basic performance requirements of vocational teachers in general (Cotrell, Bennett, Cameron, Chase, Molnar, and Wilson, 1971a). During this phase of the study 237 performance elements, identified through application of an occupational analysis technique, were identified by a task force composed of representatives from six vocational areas (on and off-farm agriculture, distributive, wage earning home economics, office education, special needs, and trade and industrial education). Through a national critical incident study an additional 30 performance elements were identified. From this list, 147 performance elements were verified and 226 performance-oriented objectives were developed.

In the second report, Cotrell, Bennett, Cameron, Chase, Molnar, and Wilson (1971b) compiled the data from the first study into a document that attempted to present performance-oriented general objectives. Those general objectives were intended as guidelines for writing specific objectives for vocational and technical teacher education curricula. Although the document was not actually field tested, it was reviewed by teacher educators in Ohio who used the study to construct specific objectives in actual practice.

The purpose of the third report (Cotrell, Cameron, Chase, Doty, Gorman, and Molnar, 1972) was to determine which performance elements were common to a majority of the six vocational program areas (on and off-farm agriculture, distributive, wage-earning home economics, office occupations, special needs, and trade and industrial education), and also to determine those elements which were unique to one or more of the programs. The results of the study lead to the conclusion that the performance requirements of all six secondary level vocational programs were similar.

In the fourth report, Cotrell, Chase, and Molnar (1972a) described 390 performance requirements to be used as guidelines in the development of performance based core curricula for in-school laboratory teachers and cooperative secondary program teacher-coordinators in vocational and technical education. Those performance requirements were synthesized from the performance element data identified and evaluated in the first two phases of the project.

In the fifth report, Cotrell, Chase, and Molnar (1972b) compiled the performance-oriented general objectives intended as guidelines for writing specific objectives for vocational and technical teacher education curricula. Those general objectives are the result of an extensive enumeration and analysis of important pedagogical performance requirements for leaders of vocational programs and teacher-coordinators of secondary cooperative programs.

During this same period of time, Feck (1971) conducted a study to seek information which would be helpful to teacher educators in planning professional education programs for post-secondary teachers of agriculture. The results of that study produced 117 professional education competencies that were perceived as above-average in importance by the respondents for becoming a successful technical teacher of agriculture. Data for the study were obtained from a stratified random sample of two-year institutes or colleges in the United States offering agricultural technology curricula. The respondents consisted of technical teachers of agriculture, administrators of agricultural technology programs, and state supervisors of vocational agriculture.

Ely and Drake (1973) identified 422 pedagogical performance elements, or professional education behavior statements, needed by teachers of occupational education. The study surveyed a random sample of 577 occupational teachers in New York State from a population of 1648.

A study conducted by Huffstatler and McCallon (1973) determined the professional development needs of teachers in vocational-technical education and identified those needs in terms of competencies and instructional areas to determine if university courses were related to those specific competency needs. The results of the study produced a matrix of professional development needs by areas and competency clusters and a matrix of university course offerings and specific competencies.

The major purpose of a study conducted by Matteson, Bjoraker, and Jensen (1974) was to identify and compare the competencies needed and possessed by secondary and post-secondary agricultural instructors and to determine whether those competencies should be developed in pre-service and/or in-service educational programs. A panel consisting of four state consultants, four instructors of secondary agricultural programs, and four Wisconsin State Educators were formed to evaluate and to rate the 121 competencies identified in the study. The investigators found 121 competencies deemed to be needed by agricultural educators in order to be successful as teachers.

Garner (1974) surveyed 120 supervising teachers in agriculture and natural resources education in Michigan. His study attempted to identify competencies needed by students prior to student teaching. A total of 86 competencies were evaluated as to their importance for a candidate to acquire prior to the student teaching experience. All 86 competencies were felt to be basic and essential.

A study conducted by Moore and Bender (1975) was designed to identify professional education competency needs for vocational agriculture teachers in Ohio. The questionnaire collected data regarding educational/occupational backgrounds of the respondents, teachers' perceptions of the importance of 256 professional education competencies, and teachers' perceptions of their own proficiency. The results of the study showed that 72 percent of the 256 professional education competencies were rated above average in importance and 95.7 percent of the respondents rated their degree of proficiency as above average.

In 1976 Herring conducted a study to determine and validate the professional competencies needed by vocational agriculture teachers in Texas. The findings from the study were intended for incorporation into the teacher education programs of the nine teacher training institutions in Texas. The results of the study identified 135 competencies divided into 12 categories. The study surveyed vocational agriculture teachers, teacher educators, and members of the state supervisory staff in agricultural education with a total of 347 people responding. As a result of the project activities, a core of professional competencies required by vocational agriculture teachers was identified and validated.

After reviewing the literature, it becomes obvious that several studies have been conducted for the purpose of identifying and validating the professional education competencies needed by vocational education teachers and agribusiness and natural resources education teachers. However, an information void exists regarding the professional education competencies needed by agribusiness and natural resources education teachers in Florida. No research studies regarding this topic have been conducted in Florida, nor can any be generalized to Florida. Consequently, there existed a need to conduct this study to provide the research basis to properly document the professional competencies needed by teachers in Florida and to provide the foundation upon which to develop a competency-based teacher education program in agricultural education. Therefore, it was essential that this study be conducted at this time in order to develop the basis for modifying the existing curriculum in agricultural education in order to more effectively and efficiently prepare teachers of agribusiness and natural resources education to assume teaching positions in the public schools of Florida.

# CHAPTER III

## RESEARCH PROCEDURE

This chapter reports the research procedures employed to accomplish the major purpose and objectives of the study and is divided into the following sections: (1) population investigated; (2) instrumentation; (3) data collection procedures; and (4) statistical analysis.

### Population Investigated

The population for this study consisted of incumbent teachers of agribusiness and natural resources education, state staff members for agricultural education, teacher educators in agricultural education, and county supervisors of agricultural education. The latter three groups were combined to compose what was called the joint staff. Accurate data regarding teachers were not available to stratify the population for sampling purposes; therefore, the entire population of teachers was surveyed. Also, the entire population of teacher educators, state staff members, and county supervisors were included in the study because of the small number. The names and addresses of the potential respondents were obtained from the Agribusiness and Natural Resources Education Personnel Directory (Florida Department of Education, 1977).

Five-hundred eighty-nine teachers and 24 joint staff members from Florida were identified, constituting the population investigated. Each respondent was assigned a discrete code number by the investigators. A master list was then compiled for mailing purposes containing the code number, name, and address of the teachers and joint staff members.

### Instrumentation

In order to obtain requisite information, closed form opinionnaires were developed to obtain data from joint staff personnel and teachers. Other data collection procedures were considered; however, the closed form opinionnaire was determined the most appropriate method for obtaining the required data because of the population size, the diverse types of programs in the state, and the necessity to construct a procedure that would elicit necessary information while requiring a minimum of the respondents time. The professional education competency statements were developed as a result of reviewing relevant literature and conferring with members of the University of Florida faculty.

On November 12, 1976 a letter (Appendix A), the tentative instrument, and a self-addressed, stamped return envelope were mailed to a jury consisting of 25 teachers of agribusiness and natural resources education throughout the state of Florida. Five teachers were selected from each of the five supervisory regions to serve as jury members. The jury was asked to evaluate the instrument by: (1) reading each statement for clarity, relevance, and possible importance to the study; (2) making any comments or suggestions in the space provided below each statement;

(3) completing the questionnaire by responding to each statement; and (4) listing any additional professional competencies that should be included on the instrument. Nineteen teachers (76 percent) responded to the request. In addition, four faculty members of the Department of Agricultural and Extension Education at the University of Florida were personally contacted by the investigators and requested to evaluate the tentative opinionnaire by: (1) reading each statement for clarity, relevance, and possible importance to the study; (2) making any comments or suggested changes in the space provided below each item; and (3) listing additional items that should be included. Suggestions and recommendations were assimilated and provided the basis upon which to make changes.

The closed form opinionnaire that resulted was divided into two sections for the teachers' form (Appendix B) and one section for the joint staff form (Appendix C). Section I of the opinionnaire was designed to obtain data regarding the professional competencies needed by agribusiness and natural resources education teachers in Florida. The statements in Section I were responded to on a six-point Likert scale with numerical values assigned for all possible responses as follows: 1-Not Important; 2-Very Low Importance; 3-Low Importance; 4-Moderate Importance: 5-High Importance; and 6-Very High Importance. The purpose of Section II of the opinionnaire was to obtain pertinent demographic data concerning the responding teachers. Respondents were asked to check the appropriate response.

The revised opinionnaires were printed by the Editorial Department of the Institute of Food and Agricultural Sciences, University of Florida. The opinionnaires were color coded for each respondent group. The opinionnaire for teachers was printed on yellow paper and composed of two sections while the opinionnaire for joint staff members was printed on white paper and consisted of only one section.

## Data Collection Procedure

All opinionnaires were numerically coded to provide a method of determining respondents thus enabling the investigators to initiate follow-up procedures for non-respondents and to afford a degree of anonymity to each respondent. Two cover letters were developed, one for joint state and county staff (Appendix D) and one for teachers (Appendix E), to explain the purpose of the research and to solicit participation.

On January 4, 1977 a cover letter, appropriately coded opinionnaire, and a stamped, self-addressed envelope were mailed to each of the 613 subjects identified in the population. On January 26, 1977, twenty-two days after the initial mailing, a follow-up letter to non-responding teachers (Appendix F) and joint staff members (Appendix G), with a coded opinionnaire, and a stamped, self-addressed return envelope were mailed.

March 7, 1977 was set as a deadline date for receiving opinionnaires. On that date, 370 completed opinionnaires had been received. This represented 60 percent of the total instrument mailed on January 4, 1977. Response from 22 teacher educators, state staff members, and county supervisors of agriculture were received representing 92 percnet of that population. Responses from 348 teachers (59 percent) were received.

## Statistical Analysis

Each item response was transferred from the completed opinionnaires to IBM cards by the University of Florida Data Processing Center. Each card was subsequently verified in order to detect and correct errors.

To analyze data pertaining to objectives one and two, means were determined for teachers and for the joint staff. Data pertaining to objective three were also analyzed using descriptive statistics; however, in this case, the mean for each item for teachers was added to the mean for each item for the joint staff. The sum was then divided by two, thus producing the combined mean. Using this procedure, teachers and joint staff members were given equal weight in determining the combined mean for each item.

The *t*-test was used to analyze data pertaining to objective four with the .05 level of significance set as the critical standard. Analysis of variance, using the .05 level of significance as the critical standard, was used to analyze data pertaining to objective five.

All statistical analysis were conducted using the Statistical Analysis System (Barr, Goodnight, Sall, and Helwig, 1976) for the IBM installation at the University of Florida. The findings resulting from analyses of these data are reported in Chapter IV.

## CHAPTER IV

## PRESENTATION AND ANALYSIS OF DATA

This chapter presents data that identifies the professional education competencies needed by agribusiness and natural resources education teachers as perceived by incumbent teachers, joint staff members, and the combined input of incumbent teachers and members of the joint staff. Additionally, data pertaining to competencies needed by teachers are presented that compares perceptions of incumbent teachers and joint staff members as well as incumbent teachers according to selected demographic characteristics. The competency statements were responded to on a six-point Likert scale with numerical values assigned to all possible responses as follows: 1 - Not Important; 2 - Very Low Importance; 3 - Low Importance; 4 - Moderate Importance; 5 - High Importance; and 6 - Very High Importance.

### Objectives One, Two, and Three

Objective one sought to identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by incumbent teachers while objective two was designed to identify the professional education competencies needed by agribusiness and natural resources education teachers as perceived by joint staff members. Data pertaining to objectives one and two were analyzed by determining the mean response for each competency statement. The results are displayed in Tables 1 through 11.

The purpose of objective three was to determine the professional education competencies needed by teachers of agribusiness and natural resources education based on the combined input of incumbent teachers and joint staff members. Data pertaining to this objective were analyzed using combined means. To determine the combined mean for each item, the mean for each item for teachers was added to the mean for each item for the joint staff, the sum was then divided by two to produce the combined mean for each item. The combined means may also be observed in Tables 1 through 11.

The means for teachers, joint staff, and combined means are reported in Table 1 regarding the importance of professional competencies pertaining to program planning, development, and evaluation. The means for the 14 competency statements ranged from 4.05 to 5.55. Table 2 shows the means obtained from teachers, joint staff, and combined means regarding the importance of professional competencies relative to instructional planning. They ranged from 4.56 to 5.77. It is important to point out that all of the combined means exceeded 5.0 with the exception of one which approached that value.

Displayed in Table 3, are the means obtained from teachers, joint staff, and combined means regarding the importance of professional competencies related to instructional execution. The combined means indicated that 22 of the competencies were viewed as moderate to high in importance

Table 1

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Program Planning, Development, and Evaluation

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Plan a community survey | 4.17 | 4.05 | 4.11 |
| 2. | Collect and analyze community survey data | 4.17 | 4.18 | 4.18 |
| 3. | Report and use the findings of a community survey in developing a program | 4.35 | 4.64 | 4.49 |
| 4. | Organize or reorganize an agricultural advisory committee | 4.60 | 5.09 | 4.84 |
| 5. | Maintain an agricultural advisory committee | 4.61 | 5.23 | 4.92 |
| 6. | Develop program goals and objectives | 5.32 | 5.55 | 5.43 |
| 7. | Utilize program planning guides in planning the program | 4.88 | 5.55 | 5.21 |
| 8. | Utilize curriculum guides in planning the program | 4.90 | 5.50 | 5.20 |
| 9. | Develop a course of study | 5.35 | 5.50 | 5.43 |
| 10. | Develop long-range plans for a program | 5.11 | 5.19 | 5.15 |
| 11. | Specify the long-range facility, equipment, and supply needs for a program. | 5.01 | 4.68 | 4.85 |
| 12. | Prepare a long-range budget for the program | 4.61 | 4.50 | 4.56 |
| 13. | Conduct a student follow-up study | 4.23 | 4.55 | 4.39 |
| 14. | Evaluate the program | 5.14 | 5.36 | 5.25 |

Table 2

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Instructional Planning

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Determine student needs and interests | 5.32 | 5.41 | 5.36 |
| 2. | Develop pre-tests to determine the knowledge and skill level of students | 4.56 | 5.00 | 4.78 |
| 3. | Develop student performance objectives (attitudes, skills, and knowledge) | 4.93 | 5.64 | 5.28 |
| 4. | Plan a unit of instruction | 5.20 | 5.77 | 5.49 |
| 5. | Write lesson plans | 4.64 | 5.59 | 5.11 |
| 6. | Determine in-school learning experiences (classroom and/or laboratory) | 5.11 | 5.73 | 5.42 |
| 7. | Select and obtain student instructional materials | 5.19 | 5.50 | 5.35 |
| 8. | Prepare teacher made instructional materials | 4.96 | 5.32 | 5.14 |

Table 3

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Instructional Execution

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Select and use various teaching techniques | 5.20 | 5.73 | 5.46 |
| 2. | Conduct field trips | 4.80 | 5.32 | 5.06 |
| 3. | Conduct group discussions, panel discussions, and symposiums | 4.16 | 4.86 | 4.51 |
| 4. | Stimulate learning through brainstorming, buzz groups, and question box techniques | 3.97 | 4.86 | 4.42 |
| 5. | Direct students in instructing other students | 4.42 | 4.82 | 4.62 |
| 6. | Employ simulation techniques (role playing, case study) | 3.94 | 4.82 | 4.38 |
| 7. | Direct supervised study | 4.79 | 5.23 | 5.01 |
| 8. | Direct student laboratory experiences (shop, greenhouse, etc.) | 5.43 | 5.77 | 5.60 |
| 9. | Direct students in applying problem-solving techniques | 5.08 | 5.50 | 5.29 |
| 10. | Present information by the project method | 4.75 | 5.14 | 4.94 |
| 11. | Introduce a lesson | 4.92 | 5.59 | 5.26 |
| 12. | Summarize a lesson | 4.93 | 5.55 | 5.24 |
| 13. | Give a lecture | 4.19 | 4.68 | 4.43 |
| 14. | Employ oral questioning techniques | 4.83 | 5.36 | 5.09 |
| 15. | Employ reinforcement techniques | 4.92 | 5.55 | 5.23 |

Table 3 (continued)

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 16. | Provide special instruction for slow learners | 4.99 | 5.23 | 5.11 |
| 17. | Provide enriched instruction to challenge the abilities of the more capable student | 5.16 | 5.36 | 5.26 |
| 18. | Present a concept, principle, or skill through a demonstration | 5.20 | 5.64 | 5.42 |
| 19. | Direct individualized instruction | 4.96 | 5.27 | 5.11 |
| 20. | Present information through team teaching | 3.72 | 4.32 | 4.02 |
| 21. | Present information with the assistance of a resource person | 4.46 | 4.95 | 4.71 |
| 22. | Illustrate with bulletin boards and exhibits | 4.40 | 4.86 | 4.63 |
| 23. | Illustrate with models, real objects, and flannel boards | 4.65 | 5.10 | 4.87 |
| 24. | Present information with an opaque projector | 4.06 | 4.45 | 4.26 |
| 25. | Present information with an overhead projector | 4.55 | 5.09 | 4.82 |
| 26. | Present information with slides | 4.80 | 5.18 | 4.99 |
| 27. | Present information with filmstrips | 4.74 | 5.00 | 4.87 |
| 28. | Present information with audio recordings | 4.28 | 4.64 | 4.46 |
| 29. | Present information with sound motion pictures | 4.77 | 5.09 | 4.93 |
| 30. | Present information with a telelecture | 3.80 | 4.24 | 4.02 |

Table 3 (continued)

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 31. | Present information with televised and video-taped materials | 3.88 | 4.45 | 4.17 |
| 32. | Direct programmed instruction | 4.25 | 4.62 | 4.44 |
| 33. | Present information with charts | 4.36 | 4.90 | 4.63 |
| 34. | Present information with a chalkboard | 4.67 | 5.19 | 4.93 |
| 35. | Present information through an illustrated talk | 4.62 | 4.86 | 4.74 |
| 36. | Teach a concept or principle | 4.92 | 5.36 | 5.14 |
| 37. | Recognize, interpret, and utilize student actions and behavior as a teaching tool | 4.97 | 5.23 | 5.10 |

Table 4

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Instructional Evaluation

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Establish criteria for student performance | 4.99 | 5.55 | 5.27 |
| 2. | Assess student cognitive performance (understanding of factual information) | 4.86 | 5.55 | 5.20 |
| 3. | Assess student affective performance (changes in attitudes, interest, etc.) | 4.91 | 5.59 | 5.25 |
| 4. | Assess student psychomotor performance (performance of manipulative skills and abilities) | 4.89 | 5.73 | 5.31 |
| 5. | Direct students self-evaluation and develop criteria for evaluation | 4.63 | 5.23 | 4.93 |
| 6. | Determine student grades | 4.55 | 5.14 | 4.84 |
| 7. | Evaluate instructional effectiveness | 5.17 | 5.55 | 5.36 |
| 8. | Assess the adequacy of the agricultural facilities and equipment relative to technological changes | 5.07 | 5.24 | 5.15 |
| 9. | Assess the adequacy of the agricultural facilities and equipment relative to the program offered | 5.17 | 5.41 | 5.29 |
| 10. | Determine the reasons students drop out of the program | 4.83 | 5.23 | 5.03 |

Table 5

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Instructional Management

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Organize the laboratory (shop, land lab., etc.) | 5.36 | 5.68 | 5.52 |
| 2. | Determine instructional resources needed | 5.31 | 5.45 | 5.38 |
| 3. | Provide for the safety needs of the students | 5.71 | 5.82 | 5.76 |
| 4. | Provide for the first aid needs of the students | 5.15 | 5.32 | 5.24 |
| 5. | Prepare budgets | 4.84 | 5.00 | 4.92 |
| 6. | Organize and maintain a filing system | 5.02 | 5.27 | 5.15 |
| 7. | Organize and maintain an inventory of tools, supplies, and equipment assigned to the program | 5.22 | 5.41 | 5.31 |
| 8. | Arrange for expanding the facilities for the program | 4.89 | 4.55 | 4.72 |
| 9. | Arrange for purchasing supplies and equipment for the program | 5.24 | 5.09 | 5.16 |
| 10. | Develop and implement a statement of departmental policy | 4.87 | 5.00 | 4.93 |
| 11. | Manage the instructional environment of the classroom and laboratory (lighting, temperature, housekeeping, and seating arrangements) | 4.87 | 5.41 | 5.14 |
| 12. | Manage and maintain the facility | 4.98 | 5.36 | 5.17 |
| 13. | Formulate with students acceptable standards of behavior in the classroom and laboratory | 5.32 | 5.55 | 5.43 |
| 14. | Develop and maintain student discipline | 5.61 | 5.77 | 5.69 |

Table 5 (continued)

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 15. | Prepare reports | 4.45 | 5.14 | 4.80 |
| 16. | Develop procedures for handling cash receipts | 4.84 | 4.95 | 4.90 |

Table 6

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Guidance

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Gather student data through personal contacts | 4.67 | 5.23 | 4.95 |
| 2. | Recognize potential problems of students | 5.08 | 5.45 | 5.27 |
| 3. | Encourage students to discuss their career aspirations | 5.09 | 5.41 | 5.25 |
| 4. | Communicate with prospective and continuing students during the summer | 4.85 | 5.50 | 5.17 |
| 5. | Provide information on educational and career opportunities | 5.12 | 5.33 | 5.23 |
| 6. | Select and use appropriate student data collection sources and techniques (records, tests, etc.) | 4.58 | 5.09 | 4.84 |
| 7. | Use conferences to help students meet personal, educational, and vocational needs | 4.77 | 5.32 | 5.04 |
| 8. | Confer with the student and his parents regarding his educational development | 4.82 | 5.36 | 5.09 |
| 9. | Develop and maintain liaison with school guidance personnel | 4.94 | 5.50 | 5.22 |
| 10. | Assist students in applying for employment | 4.85 | 5.14 | 4.99 |
| 11. | Assist students in applying for further education | 4.91 | 5.18 | 5.05 |

Table 7

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to School-Community Relations

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Plan, develop, and present television programs to promote the program | 3.64 | 4.23 | 3.93 |
| 2. | Plan, develop, and present radio programs to promote the program | 3.66 | 4.32 | 3.99 |
| 3. | Obtain feedback from the school and community concerning the program | 4.53 | 5.14 | 4.83 |
| 4. | Give presentations to school and community groups to promote the program | 4.54 | 5.09 | 4.82 |
| 5. | Prepare news releases and articles to promote the program | 4.54 | 5.18 | 4.86 |
| 6. | Maintain liaison with members of the community | 4.93 | 5.36 | 5.15 |
| 7. | Conduct an open house to familiarize members of the school and community with activities of the program | 4.68 | 4.86 | 4.77 |
| 8. | Sponsor student-parent activities | 4.80 | 5.32 | 5.06 |
| 9. | Develop brochures to inform the school and community of the program | 4.12 | 4.73 | 4.42 |
| 10. | Develop displays in the school and community regarding the program | 4.46 | 4.91 | 4.68 |
| 11. | Assist in planning the goals of the total school program | 4.53 | 5.00 | 4.77 |
| 12. | Develop a plan for school-community relations | 4.45 | 4.86 | 4.66 |

Table 7 (continued)

| Competencies | Means | | |
|---|---|---|---|
| | Teachers | Joint Staff | Combined |
| 13. Cooperate with state and local educators (other teachers, supervisors, consultants, state staff personnel, university faculty, etc.) | 5.11 | 5.55 | 5.33 |

Table 8

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to FFA

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Develop a personal philosophy toward the FFA | 5.00 | 5.55 | 5.27 |
| 2. | Establish a local FFA chapter | 5.12 | 5.68 | 5.40 |
| 3. | Orient students to the FFA chapter | 5.17 | 5.64 | 5.40 |
| 4. | Acquaint prospective members and their parents with the purposes, activities, and values of the FFA | 5.10 | 5.59 | 5.35 |
| 5. | Supervise formal initiation activities of the local FFA chapter | 4.84 | 5.18 | 5.01 |
| 6. | Supervise the election and installation of officers of the local FFA chapter | 4.98 | 5.55 | 5.26 |
| 7. | Assist in the development of a constitution and by-laws for the FFA chapter | 4.81 | 5.27 | 5.04 |
| 8. | Supervise students in developing a program of activities for the local FFA chapter | 5.03 | 5.45 | 5.24 |
| 9. | Evaluate the local FFA chapter | 4.95 | 5.50 | 5.22 |
| 10. | Assist students in participating in subdistrict, district, regional, state, and national activities for the FFA | 5.14 | 5.64 | 5.39 |
| 11. | Maintain a file of publications available for use in the local FFA chapter | 4.80 | 5.09 | 4.95 |
| 12. | Supervise students in obtaining FFA degrees, awards, and scholarships | 5.06 | 5.64 | 5.35 |
| 13. | Assist in the preparation of state and national reports for the FFA | 4.81 | 5.45 | 5.13 |

Table 8 (continued)

| | Competencies | Means Teachers | Joint Staff | Combined |
|---|---|---|---|---|
| 14. | Assist students in advancing within the available degrees in the FFA | 5.01 | 5.64 | 5.32 |
| 15. | Assist students with the financial management of the FFA | 4.88 | 5.23 | 5.05 |
| 16. | Supervise social and educational activities of the local FFA chapter | 4.90 | 5.32 | 5.11 |
| 17. | Train teams for leadership contests | 5.04 | 5.55 | 5.29 |
| 18. | Prepare students for leadership roles in the FFA | 5.09 | 5.59 | 5.34 |
| 19. | Supervise the development of a chapter scrapbook for the FFA | 4.32 | 4.45 | 4.38 |
| 20. | Supervise students in planning and conducting an FFA banquet | 4.89 | 5.32 | 5.10 |
| 21. | Serve as an advisor or judge for sub-district, district, regional, state, or national FFA contests | 4.58 | 4.77 | 4.68 |
| 22. | Assist students in participating in shows and fairs | 4.97 | 5.23 | 5.10 |
| 23. | Train teams for judging contests | 4.98 | 5.36 | 5.17 |
| 24. | Supervise students in publicizing the local FFA chapter | 4.82 | 5.18 | 5.00 |
| 25. | Organize school and community support for the local FFA chapter | 4.90 | 5.14 | 5.02 |
| 26. | Organize an alumni association | 4.17 | 4.45 | 4.31 |

Table 9

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Professional Role and Development

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Establish and maintain a professional philosophy of education | 5.06 | 5.59 | 5.32 |
| 2. | Establish and maintain a professional philosophy of vocational education | 5.06 | 5.64 | 5.35 |
| 3. | Identify the basic principles of vocational education | 4.93 | 5.09 | 5.01 |
| 4. | Identify the need for vocational education in Florida and the nation | 4.96 | 5.05 | 5.00 |
| 5. | Differentiate between general and vocational education | 4.71 | 4.91 | 4.81 |
| 6. | Establish and maintain a professional philosophy of agribusiness and natural resources education | 5.01 | 5.55 | 5.28 |
| 7. | Outline the administrative structure and function of the vocational education division of the Florida Department of Education | 4.08 | 4.18 | 4.13 |
| 8. | Describe all of the vocational education program areas | 3.97 | 4.36 | 4.17 |
| 9. | Determine the purpose and function of vocational education and agribusiness and natural resources education | 4.76 | 5.05 | 4.90 |
| 10. | Develop a personal plan for professional development | 4.92 | 5.23 | 5.07 |
| 11. | Participate in professional organizations | 4.75 | 5.50 | 5.12 |

Table 9 (continued)

| | Competencies | Means Teachers | Means Joint Staff | Means Combined |
|---|---|---|---|---|
| 12. | Describe the purpose and function of the Florida Vocational Association, Florida Vocational Agriculture Teachers Association, National Vocational Agriculture Teachers Association, and the American Vocational Association | 4.20 | 4.91 | 4.55 |
| 13. | Keep up-to-date in your profession and in your occupational speciality | 5.33 | 5.55 | 5.44 |
| 14. | Select, obtain, and maintain a teaching position in keeping with your professional qualifications | 5.28 | 5.29 | 5.28 |
| 15. | Serve community needs by contributing professional expertise to community activities | 4.89 | 5.18 | 5.04 |
| 16. | Attend and participate in workshops and other activities to promote professional improvement | 5.13 | 5.32 | 5.23 |
| 17. | Describe the funding system for vocational education in Florida | 4.37 | 4.55 | 4.46 |

Table 10

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Coordination and Supervised Occupational Experience Program

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Establish criteria and guidelines for operating a cooperative vocational education program in agriculture | 4.54 | 4.82 | 4.68 |
| 2. | Establish and apply policies for managing students attendance, transfers, and terminations | 4.44 | 4.64 | 4.54 |
| 3. | Identify and enroll prospective students | 4.72 | 5.27 | 5.00 |
| 4. | Assist students in the selection of supervised occupational experiences | 4.86 | 5.32 | 5.09 |
| 5. | Identify and secure prospective training stations for students | 4.76 | 5.27 | 5.02 |
| 6. | Develop the training ability of on-the-job instructors | 4.62 | 4.91 | 4.76 |
| 7. | Place students for on-the-job learning | 4.71 | 5.27 | 4.99 |
| 8. | Coordinate and supervise on-the-job instruction | 4.72 | 5.32 | 5.02 |
| 9. | Evaluate students on-the-job | 4.74 | 5.32 | 5.03 |
| 10. | Plan and conduct related instruction for students enrolled in cooperative vocational education in agriculture | 4.63 | 5.32 | 4.97 |
| 11. | Conduct an employee-employer appreciation event | 4.38 | 5.18 | 4.78 |
| 12. | Assist students in planning and developing long-range supervised occupational experiences | 4.71 | 5.27 | 4.99 |

Table 10 (continued)

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 13. | Supervise students with supervised occupational experience programs | 4.88 | 5.41 | 5.14 |
| 14. | Direct students in keeping records on their supervised occupational experience program | 4.93 | 5.32 | 5.12 |
| 15. | Develop an appropriate student evaluation system for supervised occupational experience programs | 4.73 | 5.05 | 4.89 |
| 16. | Place students on jobs upon graduation from the vocational or technical agricultural program | 4.51 | 4.77 | 4.64 |
| 17. | Place students in higher education after graduation | 4.48 | 4.64 | 4.56 |
| 18. | Involve students in evaluating cooperative work centers | 4.23 | 4.55 | 4.39 |

Table 11

Means Obtained from Teachers, Joint Staff, and Combined Means Regarding the Importance of Professional Competencies Pertaining to Adult Education

| | Competencies | Means | | |
|---|---|---|---|---|
| | | Teachers | Joint Staff | Combined |
| 1. | Organize an adult education program | 3.86 | 4.00 | 3.93 |
| 2. | Utilize teaching methods and techniques especially appropriate for adults | 4.09 | 4.05 | 4.07 |
| 3. | Advise an adult and/or young farmer organization | 3.81 | 3.91 | 3.86 |
| 4. | Organize demonstrations, field days, and tours for adults | 3.96 | 4.14 | 4.05 |
| 5. | Plan an annual program of instruction for adults | 3.89 | 4.09 | 3.99 |
| 6. | Utilize specialists in the adult education program | 4.10 | 4.14 | 4.12 |
| 7. | Conduct on-farm and on-the-job instruction for adults | 3.93 | 4.09 | 4.01 |
| 8. | Evaluate the effectiveness of an adult education program | 4.03 | 4.14 | 4.08 |
| 9. | Conduct demonstration plots for adults | 3.83 | 3.91 | 3.87 |

and that 15 of the competencies were considered high to very high in importance. The competencies, "select and use various teaching techniques" (item 1) and "directing student laboratory experiences" (item 8), received the highest combined mean ratings of 5.46 and 5.60 respectively. The lowest combined mean was 4.02 for the competencies, "present information through team teaching" (item 20) and "present information with a telelecture" (item 30), thus indicating that of the competencies listed, those two were considered the least important.

Table 4 shows the means obtained from the two respondent groups and the combined means regarding the importance of professional competencies pertaining to instructional evaluation. All of the competencies received a combined mean rating above five with the exception of two (items 5 and 6).

The 16 competency statements regarding instructional management, displayed in Table 5, received a mean rating ranging from 4.45 to 5.82. The highest combined mean obtained was 5.76 for the competency, "provide for the safety needs of the students" (item 3). This was the highest combined mean identified in the study.

The data illustrated in Table 6, represents the means obtained regarding the importance of professional competencies related to guidance. The competency statements means ranged from 4.58 to 5.50. The combined means indicated that three of the competencies were considered moderate to high in importance while eight of the competencies were rated high to very high in importance.

Table 7 presents data regarding the importance of professional competencies pertaining to school-community relations. Two of the combined means were less than 4.0, eight were between 4.0 and 5.0, and three were above 5.0.

Displayed in Table 8 are the means obtained regarding the importance of professional competencies in relation to FFA. The means obtained ranged from 4.17 to 5.68. It may be observed that 22 of these competencies, based on combined means, received a mean rating of 5.0 or greater with only four competencies receiving a mean rating of less than 5.0.

Reported in Table 9 are the means obtained from teachers, joint staff, and the combined means regarding the importance of professional competencies regarding professional role and development. The means shown in this table ranged from 3.97 to 5.64.

The means obtained from the two respondent groups and the combined means regarding competencies pertaining to coordination and supervised occupational experience program are displayed in Table 10. The lowest combined mean obtained was 4.39 and the highest combined mean was 5.14. Means for teachers and joint staff ranged from 4.23 to 5.41. Only seven of the 18 competency statements received a combined mean greater than 5.0.

Displayed in Table 11 are the means regarding the importance of professional competencies pertaining to adult education. These nine competency statements received the lowest rating of all the competencies. The means ranged from 3.81 to 4.14. Five of the competency statements received a combined mean rating exceeding 4.00, while the remaining four competencies received a combined mean rating of less than 4.00.

Of the 179 competencies studied, incumbent teachers recognized 14 (8 percent) of the competencies as low to moderate in importance, 119 (66 percent) of the competencies as moderate to high in importance, and 46 (26 percent) of the competencies as high to very high in importance. Joint staff members rated two (1 percent) of the competencies as low to moderate in importance, 50 (28 percent) of the competencies as moderate to high in importance, and 127 (71 percent) of the competencies as high to very high in importance. The means that resulted from the combined input of both incumbent teachers and joint staff members yielded the following results: six (3 percent) of the competencies were considered low to moderate in importance; 75 (42 percent) of the competencies were considered moderate to high in importance; and 98 (55 percent) of the competencies were considered high to very high in importance.

## Objective Four

The fourth objective sought to compare perceptions of incumbent teachers and joint staff members regarding professional competencies needed by teachers. Data pertaining to this objective were analyzed using the t-test with the .05 level of significance as the critical standard. The 179 competencies investigated were divided into 11 categories. For the purpose of analyses, overall means were determined for teachers and joint staff members by major competency categories. The results of these analyses are displayed in Tables 12 through 22. In all categories, joint staff members rated the competency categories higher than did teachers. Significant differences at the .05 level were detected for six of the 11 competency categories. Those categories where significant differences existed were: instructional planning; instructional execution; instructional evaluation; guidance; school-community relations; and coordination and supervised occupational experience program. Those competency categories where significant differences did not exist were: program planning, development, and evaluation; instructional management; FFA; professional role and development; and adult education.

Teachers rated the most important to the least important competency categories as follows: instructional management; instructional planning; instructional evaluation; FFA; guidance; professional role and development; program planning, development, and evaluation; coordination and supervised occupational experience program; instructional execution; school-community relations; and adult education. Joint staff members rated the most important to the least important competency categories as follows: instructional planning; instructional evaluation; FFA; guidance; instructional management; professional role and development; coordination and supervised occupational experience program; instructional execution; program planning, development, and evaluation and school-

Table 12

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Program Planning, Development, and Evaluation

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 4.97 | | |
| Teachers | 345 | 4.75 | 1.56 | 0.1185 |

Table 13

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Instructional Planning

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.49 | | |
| Teachers | 342 | 4.99 | 3.68 | 0.0003 |

Table 14

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Instructional Execution

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.08 | | |
| Teachers | 346 | 4.61 | 3.82 | 0.0002 |

Table 15

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Instructional Evaluation

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.42 | | |
| Teachers | 345 | 4.91 | 3.72 | 0.0002 |

Table 16

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Instructional Management

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.30 | | |
| Teachers | 346 | 5.11 | 1.42 | 0.1574 |

Table 17

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Guidance

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.32 | | |
| Teachers | 344 | 4.88 | 3.00 | 0.0029 |

Table 18

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to School-Community Relations

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 4.97 | | |
| Teachers | 345 | 4.46 | 2.80 | 0.0054 |

Table 19

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to FFA

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.33 | | |
| Teachers | 334 | 4.89 | 1.85 | 0.0647 |

Table 20

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Professional Role and Development

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.11 | | |
| Teachers | 345 | 4.79 | 1.89 | 0.0593 |

Table 21

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Coordination and Supervised Occupational Experience Program

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 5.09 | | |
| Teachers | 341 | 4.65 | 2.21 | 0.0274 |

Table 22

t-Test Comparison Between Means of Teachers and Joint Staff Regarding the Importance of the Professional Competency Category Pertaining to Adult Education

| Variable | N | Means | t-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Joint Staff | 22 | 4.05 | | |
| Teachers | 336 | 3.93 | 0.41 | 0.6842 |

community relations were tied; and adult education. Based on the combined input of teachers and joint staff members, the most important to the least important competency categories were as follows: instructional planning; instructional management; instructional evaluation; FFA; guidance; professional role and development; coordination and supervised occupational experience program; program planning, development, and evaluation; instructional execution; school-community relations; and adult education.

## Objective Five

The final objective was designed to compare the perceptions of incumbent teachers, according to selected demographic characteristics, regarding professional education competencies needed by teachers of agribusiness and natural resources education. Data were analyzed using analysis of variance with the .05 level of significance as the critical standard.

Teachers' perceptions were grouped by the type of school where employed: junior high schools, middle schools, senior high schools, vocational technical centers, junior colleges, and other school settings. The results are presented in Table 23. Significant differences at the .05 level were determined among the groups for four of the 11 categories. The competency categories where significant differences existed were: program planning, development, and evaluation; instructional planning; FFA, and adult education.

Incumbent teachers were divided into three groups depending upon the number of students they taught per day. The groups were: low - 0-85 students; medium - 86-115 students; and high - 116 or more students. It may be observed in Table 24 that the three respondent groups differed significantly at the .05 level concerning three competency categories: program planning, development, and evaluation; guidance; and FFA.

Teachers were grouped into three age categories: low (35 years or less), medium (36-50 years), and high (51 years and above) to determine if age influenced the importance teachers placed on the 11 competency categories. Table 25 reveals that significant differences existed among the three groups in relation to nine of the 11 competency categories. These categories were: program planning, development, and evaluation; instructional planning; instructional execution; instructional evaluation; instructional management; guidance; school-community relations; professional role and development; and coordination and supervised occupational experience program. Without exception, teachers in the highest age group rated competency categories higher than the other two age groups. Teachers in the medium age group rated the competency categories higher than teachers in the low age group on nine competency categories. A trend existed with older teachers rating competency categories higher than younger teachers.

As shown in Table 26, significant differences in perceptions existed regarding one of the 11 competency categories, adult education, among teachers with differing levels of education. Teachers were separated into

Table 23

Analysis of Variance Results Obtained from Teachers at Junior High Schools (JHS), Middle Schools (MS), Senior High Schools (SHS), Vocational Technical Centers (VTC), Junior Colleges (JC), and Other School Settings (OSS), Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|---|---|---|
| | JHS | MS | SHS | VTC | JC | OSS | | |
| Program Planning, Development, and Evaluation | 4.65 | 4.68 | 4.67 | 5.00 | 4.92 | 4.88 | 2.65 | 0.0227 |
| Instructional Planning | 4.93 | 5.12 | 4.87 | 5.16 | 5.13 | 5.10 | 2.52 | 0.0295 |
| Instructional Execution | 4.54 | 4.74 | 4.53 | 4.80 | 4.73 | 4.66 | 2.23 | 0.0503 |
| Instructional Evaluation | 4.82 | 4.91 | 4.85 | 5.16 | 5.03 | 4.92 | 1.65 | 0.1460 |
| Instructional Management | 5.08 | 5.20 | 5.06 | 5.19 | 5.04 | 5.12 | 0.47 | 0.8027 |
| Guidance | 4.83 | 4.74 | 4.87 | 4.96 | 4.88 | 4.94 | 0.52 | 0.7610 |
| School-Community Relations | 4.45 | 4.28 | 4.46 | 4.54 | 4.50 | 4.52 | 0.46 | 0.8097 |
| FFA | 4.88 | 4.66 | 5.11 | 4.26 | 3.85 | 5.13 | 7.48 | 0.0001 |
| Professional Role and Development | 4.78 | 4.91 | 4.71 | 5.06 | 4.91 | 4.71 | 1.49 | 0.1915 |
| Coordination and Supervised Occupational Experience Program | 4.49 | 4.53 | 4.69 | 4.70 | 4.68 | 4.67 | 0.47 | 0.7984 |
| Adult Education | 3.87 | 4.30 | 3.73 | 4.37 | 4.35 | 3.86 | 2.42 | 0.0351 |

Table 24

Analysis of Variance Results Obtained from Teachers with Low, Medium, and High Numbers of Students Per Day Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|
| | Low | Medium | High | | |
| Program Planning, Development, and Evaluation | 4.85 | 4.66 | 4.64 | 4.19 | 0.0160 |
| Instructional Planning | 5.04 | 4.93 | 4.95 | 0.96 | 0.3833 |
| Instructional Execution | 4.68 | 4.51 | 4.61 | 2.99 | 0.0515 |
| Instructional Evaluation | 4.98 | 4.82 | 4.85 | 2.35 | 0.0972 |
| Instructional Management | 5.12 | 5.06 | 5.16 | 0.58 | 0.5584 |
| Guidance | 4.98 | 4.78 | 4.77 | 3.82 | 0.0228 |
| School-Community Relations | 4.53 | 4.45 | 4.28 | 2.29 | 0.1033 |
| FFA | 4.78 | 5.11 | 4.84 | 3.22 | 0.0411 |
| Professional Role and Development | 4.87 | 4.68 | 4.76 | 2.01 | 0.1359 |
| Coordination and Supervised Occupational Experience Program | 4.73 | 4.62 | 4.46 | 2.16 | 0.1172 |
| Adult Education | 4.07 | 3.81 | 3.77 | 1.88 | 0.1549 |

Table 25

Analysis of Variance Results Obtained from Teachers with Low, Medium, and High Age Levels Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|
| | Low | Medium | High | | |
| Program Planning, Development, and Evaluation | 4.64 | 4.74 | 4.98 | 8.86 | 0.0002 |
| Instructional Planning | 4.94 | 4.93 | 5.13 | 3.13 | 0.0451 |
| Instructional Execution | 4.53 | 4.65 | 4.72 | 3.79 | 0.0235 |
| Instructional Evaluation | 4.83 | 4.89 | 5.07 | 4.11 | 0.0172 |
| Instructional Management | 5.02 | 5.06 | 5.31 | 6.99 | 0.0011 |
| Guidance | 4.78 | 4.87 | 5.08 | 5.91 | 0.0030 |
| School-Community Relations | 4.37 | 4.41 | 4.69 | 4.61 | 0.0105 |
| FFA | 4.90 | 4.67 | 5.07 | 2.84 | 0.0598 |
| Professional Role and Development | 4.68 | 4.70 | 5.09 | 8.88 | 0.0002 |
| Coordination and Supervised Occupational Experience Program | 4.51 | 4.65 | 4.91 | 5.69 | 0.0037 |
| Adult Education | 3.81 | 3.95 | 4.14 | 1.80 | 0.1674 |

Table 26

Analysis of Variance Results Obtained from Teachers with Bachelor's Degrees (B), Master's Degrees (M), Doctoral Degrees (D), No Degrees (N), and Other Degrees (O) Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|---|---|
| | B | M | D | N | O | | |
| Program Planning, Development, and Evaluation | 4.66 | 4.79 | 5.01 | 5.38 | 4.89 | 2.12 | 0.0785 |
| Instructional Planning | 4.93 | 5.01 | 5.40 | 5.06 | 5.00 | 0.98 | 0.4169 |
| Instructional Execution | 4.57 | 4.63 | 4.96 | 4.96 | 4.45 | 1.28 | 0.2786 |
| Instructional Evaluation | 4.84 | 4.96 | 5.15 | 5.13 | 4.70 | 1.00 | 0.4089 |
| Instructional Management | 5.09 | 5.10 | 5.42 | 5.41 | 5.31 | 0.69 | 0.6019 |
| Guidance | 4.85 | 4.87 | 5.35 | 4.95 | 4.95 | 0.78 | 0.5400 |
| School-Community Relations | 4.39 | 4.51 | 4.90 | 4.29 | 4.27 | 0.87 | 0.4841 |
| FFA | 4.94 | 4.91 | 3.98 | 4.50 | 5.73 | 1.64 | 0.1631 |
| Professional Role and Development | 4.73 | 4.78 | 5.55 | 5.34 | 5.24 | 2.23 | 0.0652 |
| Coordination and Supervised Occupational Experience Program | 4.61 | 4.64 | 5.20 | 5.00 | 5.03 | 0.86 | 0.4901 |
| Adult Education | 3.84 | 3.92 | 5.35 | 4.72 | 5.11 | 2.67 | 0.0324 |

four groups based on the number of teachers employed in the department. The results of these comparisons are displayed in Table 27. Significant differences at the .05 level were found to exist among the four groups concerning two competency categories: program planning, development, and evaluation and instructional execution. More emphasis tended to be placed on each of the categories as the number of teachers in the department increased.

It may be observed in Table 28 that significant differences existed among teachers with varying years of teaching experience in agriculture relative to five of the competency categories: instructional evaluation; instructional management; school-community relations; FFA; and coordination and supervised occupational experience program.

Table 29 discloses that significant differences existed among teachers previously enrolled in agribusiness and natural resources education when compared to teachers who had not been enrolled in agribusiness and natural resources education pertaining to five competency categories. Those categories where differences were detected were: program planning, development, and evaluation; instructional planning; guidance; school-community relations; and FFA. Teachers who had been students in vocational agriculture rated all competency categories higher than those teachers who had not been enrolled.

Table 27

Analysis of Variance Results Obtained from Teachers in Departments with One, Two-Three, Four-Six, and Seven or More Teachers Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|---|
| | 1 | 2-3 | 4-6 | 7 or more | | |
| Program Planning, Development, and Evaluation | 4.63 | 4.77 | 4.93 | 5.05 | 3.64 | 0.0131 |
| Instructional Planning | 4.95 | 4.97 | 5.11 | 5.20 | 1.19 | 0.3132 |
| Instructional Execution | 4.57 | 4.58 | 4.80 | 4.90 | 3.08 | 0.0272 |
| Instructional Evaluation | 4.88 | 4.87 | 5.04 | 5.24 | 2.23 | 0.0835 |
| Instructional Management | 5.10 | 5.07 | 5.32 | 5.09 | 1.47 | 0.2216 |
| Guidance | 4.85 | 4.86 | 5.01 | 5.07 | 1.01 | 0.3897 |
| School-Community Relations | 4.38 | 4.47 | 4.61 | 4.67 | 1.10 | 0.3485 |
| FFA | 4.76 | 4.95 | 5.07 | 4.88 | 1.07 | 0.3613 |
| Professional Role and Development | 4.81 | 4.70 | 5.03 | 5.07 | 2.53 | 0.0562 |
| Coordination and Supervised Occupational Experience Program | 4.56 | 4.66 | 4.76 | 4.80 | 0.68 | 0.5710 |
| Adult Education | 3.84 | 3.90 | 4.26 | 4.25 | 1.20 | 0.3110 |

Table 28

Analysis of Variance Results Obtained from Teachers with Less Than One, One-Three, and Four or More Years of Teaching Experience in Agriculture Regarding the Importance of Professional Competency Categories

| Competency Categories | Means | | | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|---|
| | Less than 1 | 1-3 | 4 or more | | |
| Program Planning, Development, and Evaluation | 4.63 | 4.63 | 4.80 | 2.54 | 0.0802 |
| Instructional Planning | 4.99 | 4.92 | 5.01 | 0.55 | 0.5774 |
| Instructional Execution | 4.53 | 4.53 | 4.65 | 1.61 | 0.2022 |
| Instructional Evaluation | 5.02 | 4.73 | 4.94 | 3.49 | 0.0317 |
| Instructional Management | 5.00 | 4.95 | 5.17 | 3.94 | 0.0204 |
| Guidance | 4.92 | 4.75 | 4.91 | 1.73 | 0.1786 |
| School-Community Relations | 4.28 | 4.26 | 4.54 | 3.92 | 0.0208 |
| FFA | 4.31 | 4.75 | 5.00 | 6.31 | 0.0020 |
| Professional Role and Development | 4.68 | 4.73 | 4.82 | 0.69 | 0.5021 |
| Coordination and Supervised Occupational Experience Program | 4.36 | 4.49 | 4.73 | 3.23 | 0.0410 |
| Adult Education | 3.77 | 4.02 | 3.92 | 0.34 | 0.7122 |

Table 29

Analysis of Variance Results Obtained from Teachers Previously Enrolled in Agribusiness and Natural Resources Education and Not Previously Enrolled in Agribusiness and Natural Resources Education Regarding the Importance of Professional Competency Categories

| Competency Categories | Means: Previously Enrolled | Means: Not Previously Enrolled | F-Ratio | Probability of Occurrence |
|---|---|---|---|---|
| Program Planning, Development, and Evaluation | 4.79 | 4.64 | 4.29 | 0.0391 |
| Instructional Planning | 5.04 | 4.86 | 5.45 | 0.0201 |
| Instructional Execution | 4.63 | 4.56 | 1.13 | 0.2883 |
| Instructional Evaluation | 4.91 | 4.88 | 0.18 | 0.6679 |
| Instructional Management | 5.13 | 5.03 | 2.05 | 0.1528 |
| Guidance | 4.93 | 4.75 | 5.39 | 0.0209 |
| School-Community Relations | 4.52 | 4.31 | 4.53 | 0.0340 |
| FFA | 4.99 | 4.69 | 5.43 | 0.0204 |
| Professional Role and Development | 4.84 | 4.68 | 3.03 | 0.0826 |
| Coordination and Supervised Occupational Experience Program | 4.69 | 4.53 | 2.07 | 0.1513 |
| Adult Education | 3.95 | 3.84 | 0.50 | 0.4780 |

# CHAPTER V

## CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The central purpose of this study was to identify and verify the professional education competencies needed by teachers of agribusiness and natural resources education. The data upon which the findings, conclusions, implications, and recommendations were developed are based upon the beliefs of 348 teachers and 22 joint staff members in Florida.

### Conclusions

Based on the findings of this study, it was concluded that incumbent teachers recognized 14 (8 percent) of the competencies as low to moderate in importance, 119 (66 percent) of the competencies as moderate to high in importance, and 46 (26 percent) of the competencies as high to very high in importance. It was further concluded that joint staff members rated two (1 percent) of the competencies as low to moderate in importance, 50 (28 percent) of the competencies as moderate to high in importance and 127 (71 percent) of the competencies as high to very high in importance. Based upon the combined input of teachers and joint staff members, it was concluded that 98 (55 percent) of the competencies were considered of high to very high in importance, 75 (42 percent) of the competencies were deemed of moderate to high in importance, and six (3 percent) were perceived of low to moderate in importance.

Furthermore, it was concluded that joint staff members rated all competency categories higher than did teachers. Also, significant differences existed at the .05 level relative to six of the 11 competency categories between teachers and joint staff members. Based on the combined input of teachers and joint staff members, it was concluded that the most important to the least important competency categories were as follows: instructional planning; instructional management; instructional evaluation; FFA; guidance; professional role and development; coordination and supervised occupational experience program; program planning, development, and evaluation; instructional execution; school-community relations; and adult education.

Based on the findings, reported in Chapter IV relative to objective five, it was concluded that significant differences at the .05 level existed regarding: four competency categories as perceived by teachers employed in varying school types; three competency categories as perceived by teachers with varying numbers of students per day; nine competency categories as perceived by teachers with varying ages; one competency category as perceived by teachers with differing educational levels; two competency categories as perceived by teachers employed in departments with varying numbers of teachers; five competency categories as perceived by teachers with varying years of agricultural teaching experience; and five competency categories for teachers who had enrolled in agribusiness and natural resources education compared with teachers who had not been enrolled.

## Implications

It appears reasonable to infer, that almost all of competencies studied are essential for teachers to possess and thus should be incorporated into the teacher education programs in agricultural education. Furthermore, the disclosures of this study lead one to imply that joint staff members place more emphasis of the importance of professional education competencies than do incumbent teachers. Another implication is that the type of school where employed, age, years of agricultural teaching experience, and previous enrollment in vocational agriculture have an influence upon teachers' beliefs regarding the importance of professional competencies.

## Recommendations

Based on the findings and conclusions drawn from this study and the impressions acquired by the investigators while conducting this research, the following recommendations were made:

1. The competencies identified and verified in this study should be sequenced and incorporated into the agricultural education curriculum in Florida.

2. Appropriate instructional material should be adopted, adapted, or developed for each competency incorporated into the agricultural education curriculum.

3. Behavioral objectives and enabling objectives should be developed or refined for each competency incorporated into the agricultural education curriculum.

4. Research should be initiated in order to determine the perceived degree of competence incumbent teachers and students express for each of the competencies that were identified and verified in this study.

5. Techniques should be developed and refined for measuring the competence of students in performing the competencies identified in this study.

6. This study should be replicated in five years to provide a basis for curricular modifications.

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APPENDIX A

Cover Letter to Jury Members

UNIVERSITY OF FLORIDA

INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

GAINESVILLE, FLORIDA 32611

Department of Agricultural and Extension Education

November 12, 1976

The Department of Agricultural and Extension Education at the University of Florida is conducting a research study to determine the professional competencies needed by beginning teachers of Agribusiness and Natural Resources Education in Florida. Your assistance is requested to evaluate the enclosed questionnaire concerning the professional competencies needed by teachers of Agribusiness and Natural Resources Education in Florida. Your evaluation will assist in determining changes that need to be made prior to its actual use in the research study.

In evaluating the instrument, please:

(1) Read each statement for clarity, relevance, and possible importance to the study. Make any comments or suggestions in the space provided below each statement.
(2) Complete the questionnaire by responding to each statement.
(3) At the end of each division in Section I, list any additional competencies that you believe should be included on the instrument in that division. Also, on the final page of Section I, list any additional competencies not previously listed.
(4) On Section II, read each question for relevance and clarity. Make any suggestions or comments in the space below each statement.

Your cooperation in furnishing the requested information is appreciated. A self-addressed, stamped envelope is enclosed for returning the completed questionnaire with your suggestions. Please mail it by November 21, 1976.

Thank you for your time, effort, and interest.

Sincerely,

Carl E. Beeman
Chairman

Jimmy G. Cheek
Assistant Professor



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APPENDIX B

Teacher Questionnaire Form

Code Number _____

PROFESSIONAL COMPETENCIES NEEDED BY TEACHERS
OF AGRIBUSINESS AND NATURAL RESOURCES
EDUCATION IN FLORIDA
(A Research Study)

Teacher Form

Agribusiness and Natural Resources teachers must demonstrate competence in two major areas, technical and professional. Technical competencies would include such items as dehorning an animal and taking a soil sample. Professional competencies would include items such as planning daily lessons and advising the FFA. This study deals only with professional competencies. This information is needed to assist teacher training institutions in Florida to decide not only what competencies should be developed in teachers, but also how much time should be devoted to the development of the competencies in both pre-service and in-service educational programs.

On the pages which follow, you will find a list of professional competencies which may be needed in order to function as an agribusiness and natural resources teacher. We are interested in finding out how you feel about these items in relation to your job as an agribusiness and natural resources education teacher. Be sure to respond to each item using the scale provided. If you do not believe a competency is applicable to the program, please circle "1" indicating that it is "Not Important."

In the enclosed self-addressed, stamped envelope please return the completed questionnaire to:

Dr. Jimmy G. Cheek
305 Rolfs Hall
Department of Agricultural and
Extension Education
University of Florida
Gainesville, Florida 32611

SECTION I

PROFESSIONAL COMPETENCIES NEEDED BY TEACHERS OF AGRIBUSINESS AND NATURAL RESOURCES EDUCATION IN FLORIDA

Directions: Circle the appropriate number after each competency statement that most nearly expresses your opinion regarding the importance of that competency to you as a teacher of Agribusiness and Natural Resources Education.

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| A. Program Planning, Development, and Evaluation | | | | | | |
| A-1. Plan a community survey | 1 | 2 | 3 | 4 | 5 | 6 |
| A-2. Collect and analyze community survey data | 1 | 2 | 3 | 4 | 5 | 6 |
| A-3. Report and use the findings of a community survey in developing a program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-4. Organize or reorganize an agricultural advisory committee | 1 | 2 | 3 | 4 | 5 | 6 |
| A-5. Maintain an agricultural advisory committee | 1 | 2 | 3 | 4 | 5 | 6 |
| A-6. Develop program goals and objectives | 1 | 2 | 3 | 4 | 5 | 6 |
| A-7. Utilize program planning guides in planning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-8. Utilize curriculum guides in planning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-9. Develop a course of study | 1 | 2 | 3 | 4 | 5 | 6 |
| A-10. Develop long-range plans for a program | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| A-11. Specify the long-range facility, equipment, and supply needs for a program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-12. Prepare a long-range budget for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-13. Conduct a student follow-up study | 1 | 2 | 3 | 4 | 5 | 6 |
| A-14. Evaluate the program | 1 | 2 | 3 | 4 | 5 | 6 |
| B. Instructional Planning | | | | | | |
| B-1. Determine student needs and interests | 1 | 2 | 3 | 4 | 5 | 6 |
| B-2. Develop pre-tests to determine the knowledge and skill level of students | 1 | 2 | 3 | 4 | 5 | 6 |
| B-3. Develop student performance objectives (attitudes, skills, and knowledge) | 1 | 2 | 3 | 4 | 5 | 6 |
| B-4. Plan a unit of instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| B-5. Write lesson plans | 1 | 2 | 3 | 4 | 5 | 6 |
| B-6. Determine in-school learning experiences (classroom and/or laboratory) | 1 | 2 | 3 | 4 | 5 | 6 |
| B-7. Select and obtain student instructional materials | 1 | 2 | 3 | 4 | 5 | 6 |
| B-8. Prepare teacher made instructional materials | 1 | 2 | 3 | 4 | 5 | 6 |
| C. Instructional Execution | | | | | | |
| C-1. Select and use various teaching techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-2. Conduct field trips | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| C-3. Conduct group discussions, panel discussions, and symposiums | 1 | 2 | 3 | 4 | 5 | 6 |
| C-4. Stimulate learning through brainstorming, buzz groups, and question box techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-5. Direct students in instructing other students | 1 | 2 | 3 | 4 | 5 | 6 |
| C-6. Employ simulation techniques (role playing, case study) | 1 | 2 | 3 | 4 | 5 | 6 |
| C-7. Direct supervised study | 1 | 2 | 3 | 4 | 5 | 6 |
| C-8. Direct student laboratory experiences (shop, greenhouse, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| C-9. Direct students in applying problem-solving techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-10. Present information by the project method | 1 | 2 | 3 | 4 | 5 | 6 |
| C-11. Introduce a lesson | 1 | 2 | 3 | 4 | 5 | 6 |
| C-12. Summarize a lesson | 1 | 2 | 3 | 4 | 5 | 6 |
| C-13. Give a lecture | 1 | 2 | 3 | 4 | 5 | 6 |
| C-14. Employ oral questioning techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-15. Employ reinforcement techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-16. Provide special instruction for slow learners | 1 | 2 | 3 | 4 | 5 | 6 |
| C-17. Provide enriched instruction to challenge the abilities of the more capable student | 1 | 2 | 3 | 4 | 5 | 6 |
| C-18. Present a concept, principle, or skill through a demonstration | 1 | 2 | 3 | 4 | 5 | 6 |
| C-19. Direct individualized instruction | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| C-20. Present information through team teaching | 1 | 2 | 3 | 4 | 5 | 6 |
| C-21. Present information with the assistance of a resource person | 1 | 2 | 3 | 4 | 5 | 6 |
| C-22. Illustrate with bulletin boards and exhibits | 1 | 2 | 3 | 4 | 5 | 6 |
| C-23. Illustrate with models, real objects, and flannel boards | 1 | 2 | 3 | 4 | 5 | 6 |
| C-24. Present information with an opaque projector | 1 | 2 | 3 | 4 | 5 | 6 |
| C-25. Present information with an overhead projector | 1 | 2 | 3 | 4 | 5 | 6 |
| C-26. Present information with slides | 1 | 2 | 3 | 4 | 5 | 6 |
| C-27. Present information with filmstrips | 1 | 2 | 3 | 4 | 5 | 6 |
| C-28. Present information with audio recordings | 1 | 2 | 3 | 4 | 5 | 6 |
| C-29. Present information with sound motion pictures | 1 | 2 | 3 | 4 | 5 | 6 |
| C-30. Present information with a telelecture | 1 | 2 | 3 | 4 | 5 | 6 |
| C-31. Present information with televised and video-taped materials | 1 | 2 | 3 | 4 | 5 | 6 |
| C-32. Direct programmed instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| C-33. Present information with charts | 1 | 2 | 3 | 4 | 5 | 6 |
| C-34. Present information with a chalkboard | 1 | 2 | 3 | 4 | 5 | 6 |
| C-35. Present information through an illustrated talk | 1 | 2 | 3 | 4 | 5 | 6 |
| C-36. Teach a concept or principle. | 1 | 2 | 3 | 4 | 5 | 6 |
| C-37. Recognize, interpret, and utilize student actions and behavior as a teaching tool | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| D. Instructional Evaluation | | | | | | |
| D-1. Establish criteria for student performance | 1 | 2 | 3 | 4 | 5 | 6 |
| D-2. Assess student cognitive performance (understanding of factual information) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-3. Assess student affective performance (changes in attitudes, interest, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-4. Assess student psychomotor performance (performance of manipulative skills and abilities) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-5. Direct students self-evaluation and develop criteria for evaluation | 1 | 2 | 3 | 4 | 5 | 6 |
| D-6. Determine student grades | 1 | 2 | 3 | 4 | 5 | 6 |
| D-7. Evaluate instructional effectiveness | 1 | 2 | 3 | 4 | 5 | 6 |
| D-8. Assess the adequacy of the agricultural facilities and equipment relative to technological changes | 1 | 2 | 3 | 4 | 5 | 6 |
| D-9. Assess the adequacy of the agricultural facilities and equipment relative to the program offered | 1 | 2 | 3 | 4 | 5 | 6 |
| D-10. Determine the reasons students drop out of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E. Instructional Management | | | | | | |
| E-1. Organize the laboratory (shop, land lab, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| E-2. Determine instructional resources needed | 1 | 2 | 3 | 4 | 5 | 6 |
| E-3. Provide for the safety needs of the students | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| E-4. Provide for the first aid needs of the students | 1 | 2 | 3 | 4 | 5 | 6 |
| E-5. Prepare budgets | 1 | 2 | 3 | 4 | 5 | 6 |
| E-6. Organize and maintain a filing system | 1 | 2 | 3 | 4 | 5 | 6 |
| E-7. Organize and maintain an inventory of tools, supplies, and equipment assigned to the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-8. Arrange for expanding the facilities for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-9. Arrange for purchasing supplies and equipment for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-10. Develop and implement a statement of departmental policy | 1 | 2 | 3 | 4 | 5 | 6 |
| E-11. Manage the instructional environment of the classroom and laboratory (lighting, temperature, housekeeping, and seating arrangements) | 1 | 2 | 3 | 4 | 5 | 6 |
| E-12. Manage and maintain the facility | 1 | 2 | 3 | 4 | 5 | 6 |
| E-13. Formulate with students acceptable standards of behavior in the classroom and laboratory | 1 | 2 | 3 | 4 | 5 | 6 |
| E-14. Develop and maintain student discipline | 1 | 2 | 3 | 4 | 5 | 6 |
| E-15. Prepare reports | 1 | 2 | 3 | 4 | 5 | 6 |
| E-16. Develop procedures for handling cash receipts | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| F. Guidance | | | | | | |
| F-1. Gather student data through personal contacts | 1 | 2 | 3 | 4 | 5 | 6 |
| F-2. Recognize potential problems of students | 1 | 2 | 3 | 4 | 5 | 6 |
| F-3. Encourage students to discuss their career aspirations | 1 | 2 | 3 | 4 | 5 | 6 |
| F-4. Communicate with prospective and continuing students during the summer | 1 | 2 | 3 | 4 | 5 | 6 |
| F-5. Provide information on educational and career opportunities | 1 | 2 | 3 | 4 | 5 | 6 |
| F-6. Select and use appropriate student data collection sources and techniques (records, tests, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| F-7. Use conferences to help students meet personal, educational, and vocational needs | 1 | 2 | 3 | 4 | 5 | 6 |
| F-8. Confer with the student and his parents regarding his educational development | 1 | 2 | 3 | 4 | 5 | 6 |
| F-9. Develop and maintain liaison with school guidance personnel | 1 | 2 | 3 | 4 | 5 | 6 |
| F-10. Assist students in applying for employment | 1 | 2 | 3 | 4 | 5 | 6 |
| F-11. Assist students in applying for further education | 1 | 2 | 3 | 4 | 5 | 6 |
| G. School Community Relations | | | | | | |
| G-1. Plan, develop, and present television programs to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| G-2. Plan, develop, and present radio programs to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-3. Obtain feedback from the school and community concerning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-4. Give presentations to school and community groups to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-5. Prepare news releases and articles to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-6. Maintain liaison with members of the community | 1 | 2 | 3 | 4 | 5 | 6 |
| G-7. Conduct an open house to familiarize members of the school and community with activities of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-8. Sponsor student-parent activities | 1 | 2 | 3 | 4 | 5 | 6 |
| G-9. Develop brochures to inform the school and community of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-10. Develop displays in the school and community regarding the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-11. Assist in planning the goals of the total school program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-12. Develop a plan for school-community relations | 1 | 2 | 3 | 4 | 5 | 6 |
| G-13. Cooperate with state and local educators (other teachers, supervisors, consultants, state staff personnel, university faculty, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| H. The F.F.A. | | | | | | |
| H-1. Develop a personal philosophy toward the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-2. Establish a local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-3. Orient students to the FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-4. Acquaint prospective members and their parents with the purposes, activities, and values of the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-5. Supervise formal initiation activities of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-6. Supervise the election and installation of officers of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-7. Assist in the development of a constitution and by-laws for the FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-8. Supervise students in developing a program of activities for the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-9. Evaluate the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-10. Assist students in participating in sub-district, district, regional, state and national activities for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-11. Maintain a file of publications available for use in the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-12. Supervise students in obtaining FFA degrees, awards, and scholarships | 1 | 2 | 3 | 4 | 5 | 6 |
| H-13. Assist in the preparation of state and national reports for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-14. Assist students in advancing within the available degrees in the FFA | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| H-15. Assist students with the financial management of the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-16. Supervise social and educational activities of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-17. Train teams for leadership contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-18. Prepare students for leadership roles in the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-19. Supervise the development of a chapter scrapbook for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-20. Supervise students in planning and conducting an FFA banquet | 1 | 2 | 3 | 4 | 5 | 6 |
| H-21. Serve as an advisor or judge for sub-district, district, regional, state, or national FFA contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-22. Assist students in participating in shows and fairs | 1 | 2 | 3 | 4 | 5 | 6 |
| H-23. Train teams for judging contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-24. Supervise students in publicizing the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-25. Organize school and community support for the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-26. Organize an alumni association | 1 | 2 | 3 | 4 | 5 | 6 |
| I. Professional Role and Development | | | | | | |
| I-1. Establish and maintain a professional philosophy of education | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
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| I-2. Establish and maintain a professional philosophy of vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-3. Identify the basic principles of vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-4. Identify the need for vocational education in Florida and the nation | 1 | 2 | 3 | 4 | 5 | 6 |
| I-5. Differentiate between general and vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-6. Establish and maintain a professional philosophy of agribusiness and natural resources education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-7. Outline the administrative structure and function of the vocational education division of the Florida Department of Education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-8. Describe all of the vocational education program areas | 1 | 2 | 3 | 4 | 5 | 6 |
| I-9. Determine the purpose and function of vocational education and agribusiness and natural resources education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-10. Develop a personal plan for professional development | 1 | 2 | 3 | 4 | 5 | 6 |
| I-11. Participate in professional organizations | 1 | 2 | 3 | 4 | 5 | 6 |
| I-12. Describe the purpose and function of the Florida Vocational Association, Florida Vocational Agriculture Teachers Association, National Vocational Agriculture Teachers Association, and the American Vocational Association | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
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| I-13. Keep up-to-date in your profession and in your occupational speciality | 1 | 2 | 3 | 4 | 5 | 6 |
| I-14. Select, obtain, and maintain a teaching position in keeping with your professional qualifications | 1 | 2 | 3 | 4 | 5 | 6 |
| I-15. Serve community needs by contributing professional expertise to community activities | 1 | 2 | 3 | 4 | 5 | 6 |
| I-16. Attend and participate in workshops and other activities to promote professional improvement | 1 | 2 | 3 | 4 | 5 | 6 |
| I-17. Describe the funding system for vocational education in Florida | 1 | 2 | 3 | 4 | 5 | 6 |
| J. Coordination and Supervised Occupational Experience Program | | | | | | |
| J-1. Establish criteria and guidelines for operating a cooperative vocational education program in agriculture | 1 | 2 | 3 | 4 | 5 | 6 |
| J-2. Establish and apply policies for managing students attendance, transfers, and terminations | 1 | 2 | 3 | 4 | 5 | 6 |
| J-3. Identify and enroll prospective students | 1 | 2 | 3 | 4 | 5 | 6 |
| J-4. Assist students in the selection of supervised occupational experiences | 1 | 2 | 3 | 4 | 5 | 6 |
| J-5. Identify and secure prospective training stations for students | 1 | 2 | 3 | 4 | 5 | 6 |
| J-6. Develop the training ability of on-the-job instructors | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| J-7. Place students for on-the-job learning | 1 | 2 | 3 | 4 | 5 | 6 |
| J-8. Coordinate and supervise on-the-job instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| J-9. Evaluate students on-the-job | 1 | 2 | 3 | 4 | 5 | 6 |
| J-10. Plan and conduct related instruction for students enrolled in cooperative vocational education in agriculture | 1 | 2 | 3 | 4 | 5 | 6 |
| J-11. Conduct an employee-employer appreciation event | 1 | 2 | 3 | 4 | 5 | 6 |
| J-12. Assist students in planning and developing long range supervised occupational experiences | 1 | 2 | 3 | 4 | 5 | 6 |
| J-13. Supervise students with supervised occupational experience programs | 1 | 2 | 3 | 4 | 5 | 6 |
| J-14. Direct students in keeping records on their supervised occupational experience program | 1 | 2 | 3 | 4 | 5 | 6 |
| J-15. Develop an appropriate student evaluation system for supervised occupational experience programs | 1 | 2 | 3 | 4 | 5 | 6 |
| J-16. Place students on jobs upon graduation from the vocational or technical agricultural program | 1 | 2 | 3 | 4 | 5 | 6 |
| J-17. Place students in higher education after graduation | 1 | 2 | 3 | 4 | 5 | 6 |
| J-18. Involve students in evaluating cooperative work centers | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
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| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| K. Adult Education | | | | | | |
| K-1. Organize an adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-2. Utilize teaching methods and techniques especially appropriate for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-3. Advise an adult and/or young farmer organization | 1 | 2 | 3 | 4 | 5 | 6 |
| K-4. Organize demonstrations, field days, and tours for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-5. Plan an annual program of instruction for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-6. Utilize specialists in the adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-7. Conduct on-farm and on-the-job instruction for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-8. Evaluate the effectiveness of an adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-9. Conduct demonstration plots for adults | 1 | 2 | 3 | 4 | 5 | 6 |

Directions: List any additional competencies that you believe are important but have not been included on the instrument and rate those competencies.

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
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L. Additional Competencies

L-1. _____ 1 2 3 4 5 6

_____

L-2. _____ 1 2 3 4 5 6

_____

L-3. _____ 1 2 3 4 5 6

_____

L-4. _____ 1 2 3 4 5 6

_____

L-5. _____ 1 2 3 4 5 6

_____

L-6. _____ 1 2 3 4 5 6

_____

Section II

Demographic Data

Directions: Please respond to the following questions by checking the appropriate response or filling in the blank.

1. In what type of school are you currently teaching?

(a) Jr. High School _____
(b) Middle School _____
(c) Sr. High School _____
(d) Vo-Tech Center _____
(e) Other (specify) _____

2. How would you describe your current teaching assignment?

(a) Pre-vocational (grades 7-9) only _____
(b) Vocational (grades 10-12) _____
(c) Both levels but primarily pre-vocational _____
(d) Both levels but primarily vocational _____
(e) Handicapped _____
(f) Handicapped/pre-vocational _____
(g) Handicapped/vocational _____
(h) Disadvantaged _____
(i) Disadvantaged/pre-vocational _____
(j) Disadvantaged/vocational _____
(k) Adult _____
(l) Technical (grades 13-14) _____
(m) Other (specify) _____

3. How many different students do you teach each day?

(a) 0 - 40 _____ (e) 96 - 105 _____ (h) 126 - 135 _____
(b) 41 - 60 _____ (f) 106 - 115 _____ (i) 136 - 145 _____
(c) 61 - 85 _____ (g) 116 - 125 _____ (j) 146 or more _____
(d) 86 - 95 _____

4. What grade level students are you teaching? check all appropriate levels

(a) 6 _____ (b) 7 _____ (c) 8 _____ (d) 9 _____ (e) 10 _____ (f) 11 _____
(g) 12 _____ (h) post-secondary (grades 13-14) _____ (i) Adults _____
(j) Other (specify) _____

5. What is your approximate age?

(a) 25 or less _____ (d) 36 - 40 _____ (g) 51 - 55 _____
(b) 26 - 30 _____ (e) 41 - 45 _____ (h) 56 - 60 _____
(c) 31 - 35 _____ (f) 46 - 50 _____ (i) over 60 _____

6. What is your sex?

(a) Female _____
(b) Male _____

7. Check the highest degree that you have earned and indicate your major for each of the degrees earned.

| Degree | | Major |
|---|---|---|
| (a) Bachelor's Degree | _____ | _____ |
| (b) Master's Degree | _____ | _____ |
| (c) Doctor's Degree | _____ | _____ |
| (d) None | _____ | |
| (e) Other | _____ | _____ |

8. What type of teaching certificate do you now have?

(a) Temporary _____
(b) Provisional _____
(c) Regular (fully certified) _____
(d) Other (specify) _____

9. What rank teaching certificate do you have?

(a) Rank I ____ (b) Rank II ____ (c) Rank III ____ (d) Other (specify) _____

10. How many agriculture teachers are there in your school?

(a) 1 _____
(b) 2 - 3 _____
(c) 4 - 6 _____
(d) 7 or more _____

11. How many years have you worked full time or part-time in agriculture since graduation from high school?

(a) None _____
(b) Less than 1 _____
(c) 1 - 3 _____
(d) 4 - 7 _____
(e) 8 - 12 _____
(f) 13 - 18 _____
(g) 19 - 25 _____
(h) 26 - 33 _____
(i) 34 or more _____

12. How many years have you been employed as a teacher of agribusiness and natural resources education (vocational agriculture)?

(a) Less than 1 _____
(b) 1 - 3 _____
(c) 4 - 7 _____
(d) 8 - 12 _____
(e) 13 - 18 _____
(f) 19 - 25 _____
(g) 26 - 33 _____
(h) 34 or more _____

13. Were you ever enrolled in agribusiness and natural resources education (vocational agriculture)?

(a) Yes _____ (b) No _____

If yes, indicate the number of years. 1 _____, 2 _____, 3 _____,

4 _____, more than 4 _____

14. Were you ever a member of the FFA?

(a) Yes _____ (b) No _____

If yes, indicate the number of years. 1 _____, 2 _____, 3 _____,

4 _____, more than 4 _____

APPENDIX C

Joint Staff Questionnaire Form



80

Code Number _____

PROFESSIONAL COMPETENCIES NEEDED BY TEACHERS
OF AGRIBUSINESS AND NATURAL RESOURCES
EDUCATION IN FLORIDA
(A Research Study)

Joint Staff Form

Agribusiness and Natural Resources teachers must demonstrate competence in two major areas, technical and professional. Technical competencies would include such items as dehorning an animal and taking a soil sample. Professional competencies would include items such as planning daily lessons and advising the FFA. This study deals only with professional competencies. This information is needed to assist teacher training institutions in Florida to decide not only what competencies should be developed in teachers, but also how much time should be devoted to the development of the competencies in both pre-service and in-service educational programs.

On the pages which follow, you will find a list of professional competencies which may be needed in order to function as an agribusiness and natural resources teacher. We are interested in finding out how you feel about these items in relation to the job of an agribusiness and natural resources education teacher. Be sure to respond to each item using the scale provided. If you do not believe a competency is applicable to the program, please circle "1" indicating that it is "Not Important."

In the enclosed self-addressed, stamped envelope please return the completed questionnaire to:

Dr. Jimmy G. Cheek
305 Rolfs Hall
Department of Agricultural and
Extension Education
University of Florida
Gainesville, Florida 32611

SECTION I

PROFESSIONAL COMPETENCIES NEEDED BY TEACHERS OF
AGRIBUSINESS AND NATURAL RESOURCES EDUCATION IN FLORIDA

Directions: Circle the appropriate number after each competency statement that most nearly expresses your opinion regarding the importance of that competency for teachers of Agribusiness and Natural Resources Education.

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| A. Program Planning, Development, and Evaluation | | | | | | |
| A-1. Plan a community survey | 1 | 2 | 3 | 4 | 5 | 6 |
| A-2. Collect and analyze community survey data | 1 | 2 | 3 | 4 | 5 | 6 |
| A-3. Report and use the findings of a community survey in developing a program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-4. Organize or reorganize an agricultural advisory committee | 1 | 2 | 3 | 4 | 5 | 6 |
| A-5. Maintain an agricultural advisory committee | 1 | 2 | 3 | 4 | 5 | 6 |
| A-6. Develop program goals and objectives | 1 | 2 | 3 | 4 | 5 | 6 |
| A-7. Utilize program planning guides in planning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-8. Utilize curriculum guides in planning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-9. Develop a course of study | 1 | 2 | 3 | 4 | 5 | 6 |
| A-10. Develop long-range plans for a program | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| A-11. Specify the long-range facility, equipment, and supply needs for a program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-12. Prepare a long-range budget for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| A-13. Conduct a student follow-up study | 1 | 2 | 3 | 4 | 5 | 6 |
| A-14. Evaluate the program | 1 | 2 | 3 | 4 | 5 | 6 |
| B. Instructional Planning | | | | | | |
| B-1. Determine student needs and interests | 1 | 2 | 3 | 4 | 5 | 6 |
| B-2. Develop pre-tests to determine the knowledge and skill level of students | 1 | 2 | 3 | 4 | 5 | 6 |
| B-3. Develop student performance objectives (attitudes, skills, and knowledge) | 1 | 2 | 3 | 4 | 5 | 6 |
| B-4. Plan a unit of instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| B-5. Write lesson plans | 1 | 2 | 3 | 4 | 5 | 6 |
| B-6. Determine in-school learning experiences (classroom and/or laboratory) | 1 | 2 | 3 | 4 | 5 | 6 |
| B-7. Select and obtain student instructional materials | 1 | 2 | 3 | 4 | 5 | 6 |
| B-8. Prepare teacher made instructional materials | 1 | 2 | 3 | 4 | 5 | 6 |
| C. Instructional Execution | | | | | | |
| C-1. Select and use various teaching techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-2. Conduct field trips | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| C-3. Conduct group discussions, panel discussions, and symposiums | 1 | 2 | 3 | 4 | 5 | 6 |
| C-4. Stimulate learning through brainstorming, buzz groups, and question box techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-5. Direct students in instructing other students | 1 | 2 | 3 | 4 | 5 | 6 |
| C-6. Employ simulation techniques (role playing, case study) | 1 | 2 | 3 | 4 | 5 | 6 |
| C-7. Direct supervised study | 1 | 2 | 3 | 4 | 5 | 6 |
| C-8. Direct student laboratory experiences (shop, greenhouse, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| C-9. Direct students in applying problem-solving techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-10. Present information by the project method | 1 | 2 | 3 | 4 | 5 | 6 |
| C-11. Introduce a lesson | 1 | 2 | 3 | 4 | 5 | 6 |
| C-12. Summarize a lesson | 1 | 2 | 3 | 4 | 5 | 6 |
| C-13. Give a lecture | 1 | 2 | 3 | 4 | 5 | 6 |
| C-14. Employ oral questioning techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-15. Employ reinforcement techniques | 1 | 2 | 3 | 4 | 5 | 6 |
| C-16. Provide special instruction for slow learners | 1 | 2 | 3 | 4 | 5 | 6 |
| C-17. Provide enriched instruction to challenge the abilities of the more capable student | 1 | 2 | 3 | 4 | 5 | 6 |
| C-18. Present a concept, principle, or skill through a demonstration | 1 | 2 | 3 | 4 | 5 | 6 |
| C-19. Direct individualized instruction | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| C-20. Present information through team teaching | 1 | 2 | 3 | 4 | 5 | 6 |
| C-21. Present information with the assistance of a resource person | 1 | 2 | 3 | 4 | 5 | 6 |
| C-22. Illustrate with bulletin boards and exhibits | 1 | 2 | 3 | 4 | 5 | 6 |
| C-23. Illustrate with models, real objects, and flannel boards | 1 | 2 | 3 | 4 | 5 | 6 |
| C-24. Present information with an opaque projector | 1 | 2 | 3 | 4 | 5 | 6 |
| C-25. Present information with an overhead projector | 1 | 2 | 3 | 4 | 5 | 6 |
| C-26. Present information with slides | 1 | 2 | 3 | 4 | 5 | 6 |
| C-27. Present information with filmstrips | 1 | 2 | 3 | 4 | 5 | 6 |
| C-28. Present information with audio recordings | 1 | 2 | 3 | 4 | 5 | 6 |
| C-29. Present information with sound motion pictures | 1 | 2 | 3 | 4 | 5 | 6 |
| C-30. Present information with a telelecture | 1 | 2 | 3 | 4 | 5 | 6 |
| C-31. Present information with televised and video-taped materials | 1 | 2 | 3 | 4 | 5 | 6 |
| C-32. Direct programmed instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| C-33. Present information with charts | 1 | 2 | 3 | 4 | 5 | 6 |
| C-34. Present information with a chalkboard | 1 | 2 | 3 | 4 | 5 | 6 |
| C-35. Present information through an illustrated talk | 1 | 2 | 3 | 4 | 5 | 6 |
| C-36. Teach a concept or principle. | 1 | 2 | 3 | 4 | 5 | 6 |
| C-37. Recognize, interpret, and utilize student actions and behavior as a teaching tool | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| D. Instructional Evaluation | | | | | | |
| D-1. Establish criteria for student performance | 1 | 2 | 3 | 4 | 5 | 6 |
| D-2. Assess student cognitive performance (understanding of factual information) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-3. Assess student affective performance (changes in attitudes, interest, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-4. Assess student psychomotor performance (performance of manipulative skills and abilities) | 1 | 2 | 3 | 4 | 5 | 6 |
| D-5. Direct students self-evaluation and develop criteria for evaluation | 1 | 2 | 3 | 4 | 5 | 6 |
| D-6. Determine student grades | 1 | 2 | 3 | 4 | 5 | 6 |
| D-7. Evaluate instructional effectiveness | 1 | 2 | 3 | 4 | 5 | 6 |
| D-8. Assess the adequacy of the agricultural facilities and equipment relative to technological changes | 1 | 2 | 3 | 4 | 5 | 6 |
| D-9. Assess the adequacy of the agricultural facilities and equipment relative to the program offered | 1 | 2 | 3 | 4 | 5 | 6 |
| D-10. Determine the reasons students drop out of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E. Instructional Management | | | | | | |
| E-1. Organize the laboratory (shop, land lab, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| E-2. Determine instructional resources needed | 1 | 2 | 3 | 4 | 5 | 6 |
| E-3. Provide for the safety needs of the students | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| E-4. Provide for the first aid needs of the students | 1 | 2 | 3 | 4 | 5 | 6 |
| E-5. Prepare budgets | 1 | 2 | 3 | 4 | 5 | 6 |
| E-6. Organize and maintain a filing system | 1 | 2 | 3 | 4 | 5 | 6 |
| E-7. Organize and maintain an inventory of tools, supplies, and equipment assigned to the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-8. Arrange for expanding the facilities for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-9. Arrange for purchasing supplies and equipment for the program | 1 | 2 | 3 | 4 | 5 | 6 |
| E-10. Develop and implement a statement of departmental policy | 1 | 2 | 3 | 4 | 5 | 6 |
| E-11. Manage the instructional environment of the classroom and laboratory (lighting, temperature, housekeeping, and seating arrangements) | 1 | 2 | 3 | 4 | 5 | 6 |
| E-12. Manage and maintain the facility | 1 | 2 | 3 | 4 | 5 | 6 |
| E-13. Formulate with students acceptable standards of behavior in the classroom and laboratory | 1 | 2 | 3 | 4 | 5 | 6 |
| E-14. Develop and maintain student discipline | 1 | 2 | 3 | 4 | 5 | 6 |
| E-15. Prepare reports | 1 | 2 | 3 | 4 | 5 | 6 |
| E-16. Develop procedures for handling cash receipts | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| **F. Guidance** | | | | | | |
| F-1. Gather student data through personal contacts | 1 | 2 | 3 | 4 | 5 | 6 |
| F-2. Recognize potential problems of students | 1 | 2 | 3 | 4 | 5 | 6 |
| F-3. Encourage students to discuss their career aspirations | 1 | 2 | 3 | 4 | 5 | 6 |
| F-4. Communicate with prospective and continuing students during the summer | 1 | 2 | 3 | 4 | 5 | 6 |
| F-5. Provide information on educational and career opportunities | 1 | 2 | 3 | 4 | 5 | 6 |
| F-6. Select and use appropriate student data collection sources and techniques (records, tests, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |
| F-7. Use conferences to help students meet personal, educational, and vocational needs | 1 | 2 | 3 | 4 | 5 | 6 |
| F-8. Confer with the student and his parents regarding his educational development | 1 | 2 | 3 | 4 | 5 | 6 |
| F-9. Develop and maintain liaison with school guidance personnel | 1 | 2 | 3 | 4 | 5 | 6 |
| F-10. Assist students in applying for employment | 1 | 2 | 3 | 4 | 5 | 6 |
| F-11. Assist students in applying for further education | 1 | 2 | 3 | 4 | 5 | 6 |
| **G. School Community Relations** | | | | | | |
| G-1. Plan, develop, and present television programs to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| G-2. Plan, develop, and present radio programs to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-3. Obtain feedback from the school and community concerning the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-4. Give presentations to school and community groups to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-5. Prepare news releases and articles to promote the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-6. Maintain liaison with members of the community | 1 | 2 | 3 | 4 | 5 | 6 |
| G-7. Conduct an open house to familiarize members of the school and community with activities of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-8. Sponsor student-parent activities | 1 | 2 | 3 | 4 | 5 | 6 |
| G-9. Develop brochures to inform the school and community of the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-10. Develop displays in the school and community regarding the program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-11. Assist in planning the goals of the total school program | 1 | 2 | 3 | 4 | 5 | 6 |
| G-12. Develop a plan for school-community relations | 1 | 2 | 3 | 4 | 5 | 6 |
| G-13. Cooperate with state and local educators (other teachers, supervisors, consultants, state staff personnel, university faculty, etc.) | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| H. The F.F.A. | | | | | | |
| H-1. Develop a personal philosophy toward the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-2. Establish a local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-3. Orient students to the FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-4. Acquaint prospective members and their parents with the purposes, activities, and values of the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-5. Supervise formal initiation activities of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-6. Supervise the election and installation of officers of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-7. Assist in the development of a constitution and by-laws for the FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-8. Supervise students in developing a program of activities for the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-9. Evaluate the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-10. Assist students in participating in sub-district, district, regional, state and national activities for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-11. Maintain a file of publications available for use in the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-12. Supervise students in obtaining FFA degrees, awards, and scholarships | 1 | 2 | 3 | 4 | 5 | 6 |
| H-13. Assist in the preparation of state and national reports for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-14. Assist students in advancing within the available degrees in the FFA | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| H-15. Assist students with the financial management of the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-16. Supervise social and educational activities of the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-17. Train teams for leadership contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-18. Prepare students for leadership roles in the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-19. Supervise the development of a chapter scrapbook for the FFA | 1 | 2 | 3 | 4 | 5 | 6 |
| H-20. Supervise students in planning and conducting an FFA banquet | 1 | 2 | 3 | 4 | 5 | 6 |
| H-21. Serve as an advisor or judge for sub-district, district, regional, state, or national FFA contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-22. Assist students in participating in shows and fairs | 1 | 2 | 3 | 4 | 5 | 6 |
| H-23. Train teams for judging contests | 1 | 2 | 3 | 4 | 5 | 6 |
| H-24. Supervise students in publicizing the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-25. Organize school and community support for the local FFA chapter | 1 | 2 | 3 | 4 | 5 | 6 |
| H-26. Organize an alumni association | 1 | 2 | 3 | 4 | 5 | 6 |
| I. Professional Role and Development | | | | | | |
| I-1. Establish and maintain a professional philosophy of education | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| I-2. Establish and maintain a professional philosophy of vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-3. Identify the basic principles of vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-4. Identify the need for vocational education in Florida and the nation | 1 | 2 | 3 | 4 | 5 | 6 |
| I-5. Differentiate between general and vocational education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-6. Establish and maintain a professional philosophy of agribusiness and natural resources education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-7. Outline the administrative structure and function of the vocational education division of the Florida Department of Education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-8. Describe all of the vocational education program areas | 1 | 2 | 3 | 4 | 5 | 6 |
| I-9. Determine the purpose and function of vocational education and agribusiness and natural resources education | 1 | 2 | 3 | 4 | 5 | 6 |
| I-10. Develop a personal plan for professional development | 1 | 2 | 3 | 4 | 5 | 6 |
| I-11. Participate in professional organizations | 1 | 2 | 3 | 4 | 5 | 6 |
| I-12. Describe the purpose and function of the Florida Vocational Association, Florida Vocational Agriculture Teachers Association, National Vocational Agriculture Teachers Association, and the American Vocational Association | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| I-13. Keep up-to-date in your profession and in your occupational speciality | 1 | 2 | 3 | 4 | 5 | 6 |
| I-14. Select, obtain, and maintain a teaching position in keeping with your professional qualifications | 1 | 2 | 3 | 4 | 5 | 6 |
| I-15. Serve community needs by contributing professional expertise to community activities | 1 | 2 | 3 | 4 | 5 | 6 |
| I-16. Attend and participate in workshops and other activities to promote professional improvement | 1 | 2 | 3 | 4 | 5 | 6 |
| I-17. Describe the funding system for vocational education in Florida | 1 | 2 | 3 | 4 | 5 | 6 |
| J. Coordination and Supervised Occupational Experience Program | | | | | | |
| J-1. Establish criteria and guidelines for operating a cooperative vocational education program in agriculture | 1 | 2 | 3 | 4 | 5 | 6 |
| J-2. Establish and apply policies for managing students attendance, transfers, and terminations | 1 | 2 | 3 | 4 | 5 | 6 |
| J-3. Identify and enroll prospective students | 1 | 2 | 3 | 4 | 5 | 6 |
| J-4. Assist students in the selection of supervised occupational experiences | 1 | 2 | 3 | 4 | 5 | 6 |
| J-5. Identify and secure prospective training stations for students | 1 | 2 | 3 | 4 | 5 | 6 |
| J-6. Develop the training ability of on-the-job instructors | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| J-7. Place students for on-the-job learning | 1 | 2 | 3 | 4 | 5 | 6 |
| J-8. Coordinate and supervise on-the-job instruction | 1 | 2 | 3 | 4 | 5 | 6 |
| J-9. Evaluate students on-the-job | 1 | 2 | 3 | 4 | 5 | 6 |
| J-10. Plan and conduct related instruction for students enrolled in cooperative vocational education in agriculture | 1 | 2 | 3 | 4 | 5 | 6 |
| J-11. Conduct an employee-employer appreciation event | 1 | 2 | 3 | 4 | 5 | 6 |
| J-12. Assist students in planning and developing long range supervised occupational experiences | 1 | 2 | 3 | 4 | 5 | 6 |
| J-13. Supervise students with supervised occupational experience programs | 1 | 2 | 3 | 4 | 5 | 6 |
| J-14. Direct students in keeping records on their supervised occupational experience program | 1 | 2 | 3 | 4 | 5 | 6 |
| J-15. Develop an appropriate student evaluation system for supervised occupational experience programs | 1 | 2 | 3 | 4 | 5 | 6 |
| J-16. Place students on jobs upon graduation from the vocational or technical agricultural program | 1 | 2 | 3 | 4 | 5 | 6 |
| J-17. Place students in higher education after graduation | 1 | 2 | 3 | 4 | 5 | 6 |
| J-18. Involve students in evaluating cooperative work centers | 1 | 2 | 3 | 4 | 5 | 6 |

| Professional Competencies | Importance Ratings | | | | | |
|---|---|---|---|---|---|---|
| | Not Important | Very Low Importance | Low Importance | Moderate Importance | High Importance | Very High Importance |
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | | | | | | |
| K. Adult Education | | | | | | |
| K-1. Organize an adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-2. Utilize teaching methods and techniques especially appropriate for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-3. Advise an adult and/or young farmer organization | 1 | 2 | 3 | 4 | 5 | 6 |
| K-4. Organize demonstrations, field days, and tours for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-5. Plan an annual program of instruction for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-6. Utilize specialists in the adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-7. Conduct on-farm and on-the-job instruction for adults | 1 | 2 | 3 | 4 | 5 | 6 |
| K-8. Evaluate the effectiveness of an adult education program | 1 | 2 | 3 | 4 | 5 | 6 |
| K-9. Conduct demonstration plots for adults | 1 | 2 | 3 | 4 | 5 | 6 |

Directions: List any additional competencies that you believe are important but have not been included on the instrument and rate those competencies.

| Professional Competencies | Importance Ratings |
|---|---|
| Importance Rating<br>1. - Not Important<br>2. - Very Low Importance<br>3. - Low Importance<br>4. - Moderate Importance<br>5. - High Importance<br>6. - Very High Importance | Not Important / Very Low Importance / Low Importance / Moderate Importance / High Importance / Very High Importance |

L. Additional Competencies

L-1. _____ 1 2 3 4 5 6

_____

L-2. _____ 1 2 3 4 5 6

_____

L-3. _____ 1 2 3 4 5 6

_____

L-4. _____ 1 2 3 4 5 6

_____

L-5. _____ 1 2 3 4 5 6

_____

L-6. _____ 1 2 3 4 5 6

_____

APPENDIX D

Initial Cover Letter to

Joint State and County Staff

UNIVERSITY OF FLORIDA

INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

GAINESVILLE, FLORIDA 32611

Department of Agricultural
and Extension Education

305 Rolfs Hall

January 4, 1977

MEMORANDUM

TO: Joint State and County Staff for Agribusiness and Natural Resources Education

FROM: Carl E. Beeman and Jimmy G. Cheek JGC

SUBJECT: Professional Competencies Needed by Teachers of Agribusiness and Natural Resources Education in Florida

Your assistance is needed in completing the enclosed questionnaire regarding professional competencies needed by teachers of agriculture in Florida. The questionnaire will take approximately 20 minutes to complete. It is important that you complete the questionnaire since the data will be used in determining what professional educational competencies should be included in the agricultural education curriculum in Florida. Please read the instructions on the front of the form prior to completing it. A self-addressed, stamped envelope is enclosed for returning the completed questionnaire. Please complete and return it prior to January 21, 1977.

Thank you for your time, cooperation, and assistance.

gt



COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATIONS COOPERATIVE EXTENSION SERVICE
SCHOOL OF FOREST RESOURCES AND CONSERVATION CENTER FOR TROPICAL AGRICULTURE

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APPENDIX E

Initial Cover Letter to Teachers

UNIVERSITY OF FLORIDA

INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

GAINESVILLE, FLORIDA 32611

Department of Agricultural
and Extension Education

305 Rolfs Hall

January 4, 1977

MEMORANDUM

TO: Teachers of Agribusiness and Natural Resources Education in Florida

FROM: Carl E. Beeman and Jimmy G. Cheek

SUBJECT: Professional Competencies Needed by Teachers of Agribusiness and Natural Resources Education in Florida

Your assistance is needed in completing the enclosed questionnaire regarding professional competencies needed by teachers of agriculture in Florida. The questionnaire will take approximately 20 minutes to complete. It is important that you complete the questionnaire since the data will be used to determine what professional educational competencies should be included in the agricultural education curriculum in Florida. Please read the instructions printed on the front of the form prior to completing it. A self-addressed, stamped envelope is enclosed for returning the completed questionnaire. Please complete and return it prior to January 21, 1976.

Thank you for your time, cooperation, and assistance.

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SCHOOL OF FOREST RESOURCES AND CONSERVATION CENTER FOR TROPICAL AGRICULTURE

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APPENDIX F

Follow-up Letter to Teachers

UNIVERSITY OF FLORIDA

INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

GAINESVILLE, FLORIDA 32611

Department of Agricultural
and Extension Education

January 26, 1977

MEMORANDUM

TO: Teachers of Agribusiness and Natural Resources Education in Florida

FROM: Carl E. Beeman and Jimmy G. Cheek JGC

SUBJECT: Professional Competencies Needed by Teachers of Agribusiness and Natural Resources Education in Florida

On January 4, 1977 you were mailed a questionnaire designed to determine the professional competencies needed by teachers of agriculture in Florida. We have not received your completed questionnaire and we are depending on your assistance in providing the necessary data for this study. While many responses have already been received, the study will be more valid if your opinions are included.

If you have not returned the opinionnaire, it would be appreciated if you would take a few minutes today to complete and return it. We have enclosed another questionnaire and a self-addressed, stamped envelope just in case you did not receive our first letter and questionnaire. The information that you provide will be combined with information provided by other respondents; consequently, neither schools nor individuals will be identified.

Your assistance in this matter will be appreciated.

JGC/ts



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SCHOOL OF FOREST RESOURCES AND CONSERVATION CENTER FOR TROPICAL AGRICULTURE

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APPENDIX G

Follow-up Letter to

Joint State and County Staff

UNIVERSITY OF FLORIDA

INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

GAINESVILLE, FLORIDA 32611

Department of Agricultural and Extension Education

January 26, 1977

MEMORANDUM

TO: Joint State and County Staff for Agribusiness and Natural Resources Education

FROM: Carl E. Beeman and Jimmy G. Cheek

SUBJECT: Professional Competencies Needed by Teachers of Agribusiness and Natural Resources Education in Florida

On January 4, 1977 you were mailed a questionnaire designed to determine the professional competencies needed by teachers of agriculture in Florida. We have not received your completed questionnaire and we are depending on your assistance in providing the necessary data for this study. While many responses have already been received, the study will be more valid if your opinions are included.

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Your assistance in this matter will be appreciated.

JGC/ts



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